THE FAUNA OF BRITISH INDIA.

INCLUDING

CEYLON AND BURMA.

Published under the authority of the Secretary of State for India in Council.

EDITED BY W. T. BLANFORD.

RHYNCHOTA.—Vol. II. (HETEROPTERA)

BY

W. L DISTANT.



Originally Published 1902 LONDON TAYLOR AND FRANCIS

Price Rs. 125 US\$ 25

First Reprint edition printed in India, 1977 TODAY & TOMORROW'S PRINTERS AND PUBLISHERS 24B/5, Karol Bagh, New Delhi-110005

PREFACE.

The second volume of the Rhynchota, by Mr. W. L. Distant, is published in two Parts, of which the first, comprising pp. 1-242, appeared in December 1903, and the other is now issued. Several of the families included in the volume have hitherto received but little attention in India, and consequently the number of genera and species described for the first time is considerable.

The first volume of Rhynchota, containing the families Pentatomidæ, Coreidæ, and Berytidæ, was issued in June 1902. The present volume contains nearly all the remaining families of the Gymnocerata, and includes the Lygæidæ, Pyrrhocoridæ, Tingididæ, Phymatidæ, Aradidæ, Hebridæ, Hydrometridæ, Henicocephalidæ, Reduvidæ, Saldidæ, Ceratocombidæ, Cimicidæ, and Capsidæ, leaving the Anthocoridæ and the Cryptocerata to be described in order to complete the account of the Indian Heteroptera. The Homoptera also remain to be dealt with.

A sketch of the structural details and a brief account of the scheme of classification, with a synopsis of the families of Heteroptera were comprised in the Introduction to the first volume. All general remarks not contained in that Introduction are deferred by the Author until the Rhynchota are completed.

In other volumes of the 'Fauna of British India' now in

iv preface.

preparation or under consideration, it is proposed to include certain families of Beetles (Coleoptera), the Butterflies, and the Land-Mollusca. The families of Beetles to be first described are of economic importance on account of the injury they do to forests and agriculture.

W. T BLANFORD.

April 1904.

Order RHYNCHOTA .	Page 1	10 Cænocoris, Fieb	Page 16
CHOI LEXXITORIO IIX .	- 1	1 nem, Gernt.	16
Suborder Heteroptera	, 1	2. maiginatus, Thunb	16
Fam. 4 Lygæidæ	1	3 nicobarensis, Mayr	17
Subfam 1 <i>Lygæinæ</i>	2	Div 2 Orsillaria ,	17
and the second s	2	1. Nysius, <i>Dall</i>	. 17
Div 1 Lygmaria		1 ceylanicus, Motsch	18
1 Astacops, Bosed	3	2 doherty, Dut	18
1 occidentalis, Dist	4	3. inconspicuus, Dist	. 18
2 Oncopeltus, Stal .	4	• ,	
1 nigriceps, Dall. 3 Lygæus, Fabr	4 5	Subfam 2 Cyminæ .	19
1 militaris, Fabr	6	1 Ninus, Stal	19
2 hospes, Fabr .	6	1-assamensis, Dist	20
3 equestris, Linn	7	2 discessus, $ ilde{D}\iota st$.	20
4 dohertyi, Dist	. 7	2 Cymus, Hahn	21
5 fimbriatus, Dall	7	l tabidus, Stäl	21
6 autolycus, Dist .	8	-	
4 Graptostethus, Stal	8	Subfam. 3 Blissinæ	21
1 servus, Fabi	8	1 Pirkimerus, Dist	22
2 argentatus, Fabi	9	${f 1.}$ sesquipedalis, ${m Dist}$. 22
3 quadratomaculatus,		2 Bochrus, Stål	23
Kirby .	9	1 foventus, Dist	23
4 trisignatus, Dist	10	3 Cavelerius, Dist	. 23
5 quadrisignatus, Dist	10	1. illustris, Dist.	. 24
6. dixoni, Dist	10	4 Macropes, Motsch	. 24
7 maculatus, Dall	11	1 spinimanus, Motsch	. 24
5 Aspilocoryphus, Stal	11	2 dilutus, Dist	25
1 guttiger, Dall	11	3 excavatus, Dist	25
2 mendicus, Fabr 6 Melanotelus, Reut	12	4 punctatus, Walk .	. 25
	12 12	5 præcerptus, Dist	. 26 26
1. bipunctatus, Dall 7 Lygæosoma, Spin	13	6 tinctus, Dist	26
7 Lygæosoma, Spin . 1 orientale, Dist .	13	7 subauratus, Dist .	26 26
2 pusillum, Dall	13	8 dentipes, Motsch 5 Ischnodemus, Freb	27 27
8 Pyrrhobaphus, Stal	. 14	1 noctulus, Dist	27
1 leucurus, Fabr	14	6. Iphiciates, Dist.	. 27
9 Arocatus, Spin	15	1 subauratus, Dist	28
1. pilosulus, Diet	15	7 Blissus, Klug	28
2 sericans Stat	15	1 gibbus, Fabi	28

Subfam. 4 Geocorina	Page 29	Div 2 Myodocharia .	Pag 47
1 Geocoris, Fallén	29		41
1 tricolor, Fabr	29	1 Vertomannus, Dist 1 capitatus, Dist	
2 lituratus, Fieb	30	2. Altomarus, Dist	
3 splendidus, Dist	30	1 green, Dist	
4 pulvisculatus, Dist	30	3 Udalricus, Dist	49
5. rutilus, Dist .	31	1 7 ***********************************	50
6 jucundus, Fieb.	31	4. Paromius, Fieb	5(
7 ornatus, Freb .	31	1 seychellesus, Walk .	5(
,		2 exiguus, Dist .	5)
Subfam 5 Colobathristinæ	32	5. Pamera, Say	5]
		1. pallicornis, Dall.	52
1. Malcus, Stal	82	2 vincta, Say	52
1 flavidipes, Stat	38	3 nietneri, Dolum	53
2. scutellatus, Dist	33	4 undulata, Dohrn	58
2. Artemidorus, Dist	33	5 punctulata, Motsch .	54
1 pressus, Dist	34	6 geniculata, Motsch	54
Culture O Tret	or.	7 scotti, Dist	54
Subsam 6 Heterogastrinæ	35	8 flavipes, Motsch .	55
1 Chauliops, Scott	35	9 sobrina, Dist	5á
1. fallax, Scott .	36	6 Eucosmetus, Bergr	55
2 Boccharis, Dist	36	1 insignis, Dist	55
1 significatus, Dist	36	1 insignis, Dist 2 incisus, Walk	56
3 Sadoletus, Dist	37	7 Caridops, Bergr	56
l validus, <i>Dist</i>	37	l gibba, Bergr	57
4. Dinomachus, Dist	37	8 Fontejanus, Bredd .	57
1 sikhimensis, Dist .	38	1. wasmann, Bredd .	58
5 Hyginus, Stål .	38		
1. signifer, Wall	39	Div 3 Rhyparochromaria	58
Subfam 7 Pachygronthmæ	39	1. Primierus, Dist	60
	_	1 bispinus, Motsch	61
1 Phlegyas, Stål ,	39	2 indicus, Dist	61
1 burmanus, Dist	40	2 Rhodoginus, Dist .	62
2 Pachygrontha, Germ	40	1 dispar, Walk	62
1 lewisi, Dist	40	3 Appolonius, Dist .	62
2 nigrovittata, Stål .	41	1 cincucornis, Walk .	63
3 dixoni, Dist	42	4 Prostemmiden, Reut	63
4 longicornis, Stål	42	1 mimica, Reut	63
0 lt. 0 0	40	5 Polycrates, Stal.	64
Subsam 8 Oxycarenina	42	1 nexus, Dist	64 64
1 Oxycarenus, Fieb	43	6 Bosbequius, Dist	65
1. lætus, <i>Kirby</i>	43	1 latus, Dist .	65
2 proximus, Walk	43	7 Sinierus, Dust 1. cingalensis, Dist .	65
3 heraldus, Dist .	44	8 Entisberus, Dist	66
4 bicolor, Fieh	44	1 archetypus, Dist .	66
5 lugubris, Motsch	44	9 Lemnus, Dist .	66
		1 ovatus, Dist	67
Subfam. 9 Aphanina	45	10 Thebanus, Dist	67
m	الدر	1 politus, Dist	67
Div 1. Cleradaria	45	11 Mizaldus, Dist .	68
1 Clerada, Sign	45	1 lewisi, Dist	68
1 apicicornis, Sign	45	12 Lachnophorus, Reut .	68
2 Edulica, Dist	46	1 singalensis, Dohrn	69
1 ornata, Dist	46	2. noctis, Dist	69

		Page		Page
	3 leucospilus, Walk	70	9 Scolopostethus, Freb .	92
	4 merula, Dist	70	1. ornandus, $Dist$.	93
13	Tropistethus, Fieb	70	10 Gonsalvus, Dist	93
	1. indicus, Dall	71	1. typus, <i>Dist</i>	93
14	Lamprodema, Fueb	71	• • •	
	1 tineoides, Dist	71	Fam. 5 PYRRHOGORIDÆ .	94
15	Cligenes, Dist	72	Tame of terrocorms .	0*
~~	1 signandus, Dist	72	Subfam 1 Largind	94
	2 patricius, Dist	72	•	0.4
	3 picturatus, Dist	73	1 Lohita, Amy & Serv	94
70		73	1 grandis, Gray	95
10	Diniella, Bergr	73	2 Iphita, Stal	96
	1 sevosa, Dist		I limbata, Stal	96
	2 trabeata, Dist	74	2 grandis, $Dist$	97
17		74	3 Physopelta, Amy & Serv	97
	1 excavatus, Dist	74	1. gutla, Burm	97
18	Suffenus, Dist	75	2 quadriguttata, Bergr	98
	1 fusconervosus, Motsch	75	3 cineticollis, Stal	98
19	Peritrechus, Freb	75	4. apicalis, Walk	98
	1 æruginosus, Dist .	76	5 schlanbuschi, Fabr	99
20	Budmus, Dist	76	o schianduschi, 1407	00
	1 brevipennis, Dist	76	Subfam 9 Demlarance	99
21	Critobulus, Dist	77	Subfam 2 Pyrrhocorinæ	99
	1 insignis, Dist	77	1 Antilochus, Stål	100
_			1. russus, <i>Śtâl</i>	101
Du	74 Aphanaria	7 8	2 coqueberts, Fabr	101
1	Aphanus, Laporte	79	3 nigripes, Burm	102
4.	1 sordidus, Fabr	79	4 pygmæus, <i>Dist</i>	102
		80	5. linestapes, Stål	
	2 lineosus, Dist 3. orientalis, Dist		2 Ectatops, Amy & Serv	102
		81		100
	4 sparsus, Disc		1 gelanor, Kirk & Edw	100
_	5 latus, Dist.	81	2 indigna, Walk	103
2	Dieuches, Dohrn	82	3 ophthalmica, Burm	
	1. uniguttatus, Thunb	82	4 rubiacea, Amy & Serv	104
	2 fuscans, Dist	83	5 limbata, Amy & Serv .	104
	3 leucoceras, Walk	83	6 distincta, de Vuillefr	
	4 femoralis, Dohrn	84	7 lateralis, de Vuillefr.	105
	5 punctipes, Dohrn	84	3 Euscopus, Stal	105
	6 uniformis, Dist	84	1 rufipes, St&l	106
	7 pallidulus, Dist	85	3 Euscopus, Stål	106
3.	. Pœantius, Stal	85	3 gestroi, Dist 4 Melamphaus, Stal	106
	1./festavus, Dist	86	4 Melamphaus, Stal	107
4	Naudarensia, Dist	86	1 faber, Fabr	107
_	1. pedata, Dist	86	2 fulromaromatus. Dohra	108
5.	Letheous, Dall	87	3 rubrocinctus, Stål 5 Odontopus, Laporte. 1 nigricornis, Stål	108
٠.	1. assamensis, Dist	87	5 Odontopus, Laporte.	108
	2 indicus, Dall.	88	1 nigricornie Stal	100
	3 extremus, Walk	88	2 scutellarıs, Walk.	109
	4 descriptus, Walk	89	3 vomeowne Wah	109
6	Ganatae Dest	89	3 varicornis, Fabr.	TVO
U			4 sanguinolens, Amy. &	110
	l clypentus, Dist	90 90	Serv	110
	2 majusculus, Dist .	80	6 Dindymus, Stat	110
- 7	· · · · · · · · · · · ·	- 90	I lanius, Stal	110
	1 picinus, Dist	91	2 rubiginosus, Fabr	111
_	2. intaminatus, Dist .	91	3 albicornis, Fabr	112
8		92	4 ovalis, Stål	112
	1. bicolor, Dist	92	5 sanguineus, Fabi.	712

		Page	i	Page
	6 bicolor, Herr -Sch	113	5 Collinutius, Dist	. 134
	7 thunbergs, Stal	113	1 alicollie, Walk	135
		113	8 Phylioptochile Fish	. 100
	8 sita, Kuby .	114	6 Phyllontochila, Freb	
-	9 cenœus, Dist		1 ravana, Ku k	
7		114	2 dentata, Tieb 7 Ammianus, Dist	136
	1 illuminatus, Dist	114	7 Ammianus, Dist	186
8	Dermatinus, Stal	115	l erosus, Fich	. 137
	1. lugubris, Dist .	115	8. Celantia, Dist	137
9	Pyrrhopeplus, Stal	115	1 vagans, Dist	. 137
·	d pictus, Dist	116	9 Cysteochila, Stal	138
10	Downhanome Faller	116		138
10	Pyrrhocoris, Fallen		1 elongata, Dist	
	1 apterus, Lunn	116	2 nexa, Dist	139
11	Scantius, Stal	117	3 tingcides, Motsch	139
	1 volucris, Gerstæck .	117	10 Bredenbachius, Dist.	139
	2 pallens, Dist	117	1. pictus, Dist	140
	3 obscurus, Dist	118	11 Ayierus, Dist	140
12	Dysdercus, Amy & Serv	118	1 hystricellus, Richter .	141
13	1 cingulatus, Fab	118	12 Elasmognathus, Freb .	141
	O also apply Fabr	119	1 green, Kuby	142
	2 olivaceus, Fabr	'	o balling Each	142
	3 migratorius, Dist	120	2 helten, Fieb	
	4 evanescens, Dist	120	13 Teleonemia, Costa.	142
	5 mesiostigma, Dist	120	1 assamensis, Dist	143
	6 supplex, Walk .	121	2 atra, Motsch .	143
	• '		14, Monanthia, Lepel & Serv	144
_	0 (17	702	l globulifera, Walk	144
Fai	n 6. Tingididæ	122	2 migraeusis, Dist	144
2	. 7. Cambanadamania	122	3 fasciata, Fieb	145
יוע	1 Cantacaderaria	•		
1	Cantacader, Amy & Serv	123	Fam 7. Phymatidæ	146
	1 quinquecostatus, Freb	123		
	2 uniformis, Dist .	124	1 Amblythyreus, Westw	146
	3 infuscatus, Dist	124	1 angustus. Westw.	147
2	Gonycentrum, Bergr	125	2 gestroi, Handl	147
ند	1 colonatum, Freb	125	3 stalu, Handl	147
	The trans Fish	126	4 quadratus, Westro	148
3	Phatnoma, Fieb	126	5 intermedius, Handl	148
	l laciniata, Fieb	120	6 rhombiventus, Westw	149
		100		149
Div		126	2 Chizocoris, Handl.	149
1	Serenthia, Spin .	127	1 stenocephalus, Handl	150
•	1 gibba, Fieb	127	3 Glossopelta, Handl	150
2	Paracopium, Dist .	128	1 truncata, Dust	
4	1 cingalense, Walk	128	2 acuta, Handl	150
	O leader Dust	128	4 Carcinocoris, Handl	151
_		129	l hampsoni, Dist	151
3			2 binghami, Sharp	151
	1 dilatatus, Dist	129	3 ermaceus, Handl	152
			4 castetsi, Handl	152
Div	3 Tingidaria	130 [
1	Or 2 atres Charles	131	Fam 8 ARADIDÆ	153
_	1. darthula, Kirk.	131		
	Co-dominative Dist.	132	Subfam 1 Aradınæ	153
2	. Cadamustus, Dist.	132	1 Aradus, Fabr	153
	1 typicus, Dist 2 suffusus, Dist	133	1 abnormis, Bergi	154
			• •	~ ~ 4
	Z Sumusus, Desi		2 candidatus. <i>Berar</i>	154
9	The limius, $Dist$	133	2 candidatus, Bergr	154 155
9	Dulinius, Dist 1 conchatus, Dist	133 133	3 mirabilis, Bergi	155
9	Dulinius, Dist 1 conchetus, Dist	133	2 candidatus, Bergr 3 mirabilis, Bergr 2 Eumenotes, Westro 1, obscura, Westro.	

Page		Page
Suhfam 2 Brachyrhynchmæ. 156	Subfam. 4 Gerrina	175
Carventus, Stal . 156	Div 1 Gerrinaria .	176
1 gestroi, Bergi 157	1 Gerris, Fabr	176
2. Artabanus, Stal 157		177
1. breviscutum, Bergi 158	2 anadyomene, Kul	177
2 setulosus, Bergi 158	3 gracilicornis, Hore	178
3 sexspinosus, Bergi 158	4 milda, Mayi	178
4 excelsus, Berg. 159	5 fossarum, Fabi	178
5 bilobiceps, Leth 159		179
3 Brachyrhynchus, Lap 159	6. salibergi, Dist	179
1 feanus, Bergs 160	7 tristan, Kirk	180
2 membranaceus, Fabr 160	8 paludum, Fabr	180
3 triangulus, Beigi 161	9 spinolæ, Leth & Serv .	180
4 lateralis, Walk 161	10 armata, Spin	
5 tagalicus, Stal . 162	11. pectoralis, Mayı	181
6 tenericornis, Bergi 162	12 adelaidis, Dohrn	181
7 undulatus, Bergi 162	13 minuta, May	181
4 Pictinus, Stal . 163	2 Estrechus, Kuk	182
l asiaticus, Bergi 163	1 kalidasa, Kul	182
2 verrucicollis, Walk . 163	3 Onychotrechus, Kn k	182
5. Neuroctenus, Fieb 164	I thexenor, Knk	188
1 par, Bergi . 164	2. sakuntala, Kok	183
2 affinis, Dist 165	4 Cylindrostethus, Fieb	184
3 serrulatus, Stål 165	1 productus, Spin	184
4 mitidulus, Bergi . 165	2 scrutator, Kn k	184
6 Aneurus, Curt . 166	5 Ptilomera, Amy & Seri	185
1. indicus, Bergi , 166	1. laticaudata, Hardw	185
	Dw. 2 Halobatınarıa	186
Fam. 9 HEBRIDÆ . 167	1	
1 Hebrus, Curt 167		186
	1. fiauenfeldanus, Buch White	107
1 orientalis, Dist . 167		187
	2 micans Esch	187
Fam. 10 Hydrometridæ . 168	3 flaviventris, Esch.	188
Subfam 1 Mesovel.inæ 168	2. Metrocoris, May	188
	1 compar, Buch White	
1 Mesoveha, Muls. & Rey 168	2 illustrarius, Dist	189
1. mulsanti, Buch White. 169	3. ståli, Dohrn . 3 Chimarrhometra, Bianchi	189
15 0 *		
Subfam 2 Hydrometrinæ 170	1 orientalis, Dist.	190
1. Hydrometra, Lati 170	4 Hemidiptera, Léon.	191
1. vittata, <i>Stål</i> . 170	l hæckeli, Léon .	192
·	For 17 Unarrangement of the	109
Subfam 3 Velunæ . 171	Fam 11. HENICOCEPHALIDÆ	
1. Rhagovelia, May 171	1 Henicocephalus, Westw	193
1. ravana, Kerk 172	1. collaris, Walk	194
2 Velia, Latr. 172	2 majusculus, Dist	194
1. currens, Fabr. 172	3. telescopicus, Kirby	194
3 Baptista, Dist 173	4 robustus, Dist .	195
1 gestroi, Dist 173	5. basalis, Westw.	195
4 Microvelia, Westro 174		
1. repentina, Dist 174	Fam 12 Reduvidae	. 196
2. singalensis, Kirk . 174	Subfam 1 Holoptilme.	198
5 Perittopus, Fich 175	1. Ptilocerus, Gray .	198
1. rufus, Fieb 175	1 fuscus, Gray	198
VOL. II.	b	100
	U	

2 Holoptalus, Lepel & Serv I melanospilus, Walk	Page 199 199	Subfam. 4 Tribelocephalinæ 1 Tribelocephalin, Stål	Page 219 220
2 viverra, Walk	200	1 indica, Walk	220
3 fasciatus, Reut.	200	2 Opisthoplatys, Westro .	221
4 burmanicus, Westro	200	1 majusculus, Dist	221
		2 tenebrarius, Stal	221
Subfam. 2 Emesinæ .	200	Subfam 5. Stenopodina .	222
D'- 1 641		1 Pygolampis, Gei m	222
Div. 1 Stenolæmaria	201	1 fæda, Stal	223
1 Ploiariola, Reut	201	2 unicolor, Walk .	223
1 oculata, Reut	202	2 Sastiapada, Amy & Serv	
2 Stenolæmus, Sign	203	I baerensprungi, Stal	224
1 crassirostris, Stat	208	3 Staccia, Stal	225
2 green, Dist	203	1 diluta, Stat	225
3 atkinsoni, Dist	204	2. plebeja, Stål	225
3 My1ophanes, Reut	204	4 Dinditus, Stal.	226
I greem, Dist .	205	1 errabundus, Dist	226
2 karema, Dist	205	5 Oncocephalus, Klug	227
4 Eugubinus, Dist .	206	1 notatus, Klug	227
1 araneus, Dist.	206	2 nabordes, Walk	228
D A F == 4	207	3 picturatus, Dist	228
Div 2 Leistarcharia.	207	4 fuscinotum, Reut	229
1 Bagauda, Bergi .	207	5 impudious, Reut	229
1. avidus, Bergr	208	6 modestus, Reut	229
2 Luteva, Dohrn	208	7 lineosus, Dist	230 230
1. feana, Dist.	209	8 klugi, Dist.	231
3 Plearia, Scop	209	9. cingalensis, Walk	231
1 greem, Dest.	209	11 schoedter, Reut	232
	i	12 micropterus, Hoi v	232
Div. 3 Emesaria .	210	13 morosus, Dist .	233
1 Ghilianella, Spin .	211	6 Caunus, Stal	233
1 phasma, Dist.	211	1. farmator, Reut	233
2 Gomesius, Dist	212	7 Canthesancus, Amy & Serv	234
1 predatorius, Dist	212	1 gulo, Stål .	235
3 Ischnobæna, Stål	213	2 helluo, <i>Stål</i>	235
	213	g picticollis, Stal .	235
2. henrici, <i>Dohrn</i> .	214	8 Phodelmus, Stal	235
4 Gardena, Dohrn .	214	1 falleni, Stål	236
1 bicolor, Dist	214	Subfam 6 Salyavatınæ .	236
	215	1 Lasarda, Stäl	287
3 invisibilis, Dohin .	216	1 annulosa, Stål	237
4 filum, Fab:	216	2 uniformis, Dist	238
		3 lecurva, <i>Dist</i>	238
Div 4. Metapteraria .	216	4. rhypara, Stål	238
1 Ischnonyctes, Stål .	216	5. erecta, Dist	239
1 alatus, Dist	217	6 longispina, Dist	239
	į	2 Valentia, Stal	289
Subfam 3 Saicina,	217	1 apetala, de l'uill .	240
_	217	2 compressipes, Stål .	240 240
1 Polytoxus, Spin . 1 pallescens, Dist .	218	8 Petalochirus, Pal	241
2 maculatus, Dist	218	1 brachialis, Stål . 2 malayus, Stål .	241
	219	3. burmanus, Dist	242
2.81	219	4 indicus, Reut	242
•	•	,	

P	Page	• • • •	Page
Subsam. 7. Acanthaspidina	943	9. tavoyana, Dist	261
Sublem, 1. 2. cuntinuoptaine.	~~0	10 biligata, Walk	201
Div. 1 Psopharia 2	243	11 flavipes, Stal	987
-		12 angularis, Stål 13. vincta, Dist	202
1. Psophis, Stal	243	14 gulo, Stal	983
l erythræa, Stål	240	15. helluo. 8/8/.	263
2 consanguines, Dist	044	15. helluo, Stal	264
2 Euvonymus, Dist	945	17 zebraica, Dist	264
1 spiniceps, Dist 2	247	18 rugulosa, Stat	264
		19 siva, Dist,	265
Div. 2. Epiroderaria 2	245	19 siva, Dist. 20 megaspila, Walk	265
-		21 apicata, Dist	266
1. Centrocnemis, Sign 2	246	22. binghami, Dist	266
1. dearmata, Dist	246	23 succines, Dist	266
2 Engroders Westen 2	247	24 divisicollis, Walk	267
l impexa. Dist	247	25 concinnula, Stat	267
1 impexa, Dist	248	26 fusconigra, Dohrn	207
1. exemplificatus, Dist 2	248	21 intentipes, steut	200
		90 rama Des	989
0 0 0 0 1 - 1 - 1 - 1	040	27 lineatipes, Reut 28. trimaculata, Reut 29. rama, Dist 30 micrographa, Walk.	269
Div 3 Reduviaria 2	240	31. tergemina, Burm.	269
Z 2220000000000000000000000000000000000	249	32 sexguttata, Fabr	270
	249	33 pustulata, Stal	270
2 quadrisignatum, Reut . 2	250	34 cinctierus, Stål	270
2 Reduvius, Lam 2	250	35 inscripta, $Dist.$	271
	250	35 inscripta, Dist	271
	251	37. coranodes, Stal	271
3 transnominalis, Dist 2		38 biguttula, Stål 39 pedestris, Stål	272
4 knyvetti, Dist	201	39 pedestris, Stal	272
6 horror Deet	202	40 umfasciata, Wolff	272
7 anomorfus Dist	253	4 Inara, Siâl 1 alboguttata, Siâl	273
8 Gerhelius, Dist	253	i alboguttata, <i>Stat</i> .	2/3
1 typicus, Dist 2	253	5 Edocla, Stål	274
4 knyvetti, Dist	254	2 pelia, Dist	975
•	- 1	2 pona, 2000	210
Dom 4 A	054	Don & You would	075
Div. 4. Acanthaspisaria 2	I	Div. 5 Lenæaria	275
	254	1. Velitra, Stål	275
	255	1. rubropieta, Amy &	
	255	Serv	276
	256	2 stigmatica, <i>Dist</i> 3 alboplagiata, <i>Stâl</i>	276
2 maculata, Dist 2	200	a altopiagiata, stat	277
3 marginata, Dist 2	257	4 sinensis, Walk	277 277
	257	5. maculata, Dist 2 Lenæus, Stål	278
1. quinquespinosa, Fabi. 2	257	1. pyrrhus, Stål	278
	258	3 Paraleneus, Reut	279
	258	l pyrrhomelas, Reut.	279
4 subrufa, Dist . 2	259	4 Sminthocoris, Dist	279
	259	1 fuscipennis, Stal	280
6 bistillata, Stål 2	260	2 marginellus, Dist	280
7. luterpes, Walk 2	260	3 green, Dist .	280
8 porrects, Dist 2	261	4 singularis, Walk	281

	Page (Page
5. Apechtia, Reut .	281	6 Sirthenen, Spin	303
l mesopyrrha, Reut	281	1 flavipes, Stål	303
/		1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	-
Div. 6. Conorhinaria	282	C 16-m 0 71-747-2-5-	004
DIVIOLOGIDATION .,	202	Subfam. 9. Echtrichodiinæ	304
1. Durganda, Amy & Serv	282	7 A	005
1 rubro Amy & Same	283	1. Antiopula, Stal	305
1 rubra, Amy & Serv. 2 fulvescens, Dist		1 pumila, Stål	305
Z Iulvescens, Dist	283	2 Audernacus, Dist	306
2 Tiarodes, Burm	284	1. atropictus, Dist .	306
1. meldolæ, <i>Dist</i>	284	2 audamanensis, Dist.	306
2 versicolor, Lap	284		. 307
3 elegans, Stal	285		
3 Conorhinus, Lap	285	1 cuneatus, Dist	307
		4 Scadra, Stat	308
1 rubrofasciatus, de Geer		1 fuscierus, Stål	308
4 Linshcosteus, Dist .	287	2. relata, Dist	309
1 carnifex, Dist	287	3 tibialis, Dist	309
Comingue discolor S421	000	4. scutellaris, Dist	309
Cerilocus discolor, Stal	288		309
		5 annulicornis, Reut	
Subfam. 8 Pratinæ	288	6 maculi ventris, Stat	. 310
		7 cincticornis, Kirby	- 310
1 Androclus, Stål	289	8. annulipes, Rent .	810
1 granulatus, Stål	289	5 Quercetanus, Dist	310
2 pictue, Herr-Schäff	290	1. atromaculatus, Dest .	311
2 Phalantus, Stal	290	2 relatus, Dist	311
1 famus Det	290		312
1 feanus, Dist		6 Mendis, Stal	
2 geniculatus, Stat	291	1 bicolor, Dist	312
3 Ectomocoris, Mayr .	291	2 nigripennis, Fabr	312
1. horridus, Ku by	. 292	7. Libavius, Dist .	313
2 erebus, Dist	292	1 green, Dist.	313
3 rufifemur, Walk	292	8 Labidocoris, Mayr	313
4 cyaneus, Stal	293	1 olegans, Mayr	314
5. tibialis, Dist	293		314
A anadmontates Tale	293		314
6 quadriguttatus, Fabi		1. pilicornis, Fabi	
7 postrcus, Walk.	294	2 dispar, Reut	315
8 ochropterus, Stål .	294	3 rufescens, Dist	315
9 cordatus, Wolff	295	4 cupreus, Reut	316
10 elegans, Fabr	295	5 scutellaris, Bredd	316
11 cordigèr, Stål	295	6 crudelis, Fabr	316
12 vishnu, Dist.	296	7 abbreviatus, Reut	317
13 atrox, Stål	296	8 atripennis, Stal .	317
	296		317
14 gangeticus, Beigr		9 comottor, Leth	318
4. Pirates, Serv	297	10 nigripes, Leth	
1 flavipes, Walk	297	, -	ģ.
2 punctum, Fubi.	298	Serv	318
3 sanctus, Fabr	. 298	1 marginatus, Reut	318
4 femoralis, Walk	299	2. linnæi, Stål.	. 319
5 affinis, Serv	299	3 pedestris, Dist	320
6 bicolor, Dist	300	4 nigroviolaceus, Reut	320
	300	5 tuberculatus, Stål	320
7. quadrinotatus, Fubi			321
8 arcuatus, Stat	. 300	6 malabaricus, Dist.	
9 mundulus, Stal	301	7 talpus, Dist	321
10 atromaculatus, Stal	301	8 insignie, Dist	. 322
11 lepturoides, Wolff.	301	9. rubromaculatus, Dist	322
5. Catamiarus, Amy & Ser	v 302	11 Stegius, Dist	322
1. brevipennis, Seiv	302	1 pravus, Dist .	323

Page Page	Pag
12. Eriximachus, Dist 323	7 giomatus, Dist 34
I alabama Diet 904	8 dives. Dist 34
1 globosus, Dist	8 dives, Dist 345
15 VIIIU8, Stat 324	9 variabilis, Dist 349
1 melanopterus, Stål 325	10. annulipes, Dest 345
2. nigriventris, Dist 325	11 nigro-rubei, Dohrn 349
2, mg.17011411, 1260 ., , 020	
	12 trichrous, Stal 343
0.14 40 4 1 1 000	13. sordidipennis, Dohrn . 344
Subfam. 10. Apiomerina 326	• •
	D-077 1: 044
1. Ectinoderus, Westw 326	Div. 3 Vesbiaria 344
1. bipunctatus, Amy. &	1 37 0(9)
	1 Vesbius, Stål 344
Serv 326	1. purpureus, Thunb 344
2 exortivus, Dist 327	2 sanguinosus, Stål 345
2 Amulius, Ståi 327	- 2226
1 rubrifemur, Bredd 328 3. Godefridus, Dist 328	
2 Godefindus Diet 900	Div. 4 Velinaria 345
U. Clouelliaus, 10111	
1 alienus, Dist 329	1. Cosmolestes, Stal 345
	1 annulipes, Dist. 346
	1 annulipes, Dist. 346 2 picticeps, Stat 346
Subfam. 11. Harpactorina . 329	2 picticelis, bott
Candidit II. Harpactorine , 020	2. Velinus, Stål 346
70 7 70 L	1. malayus, Stal 347
Div 1. Rhaphidoso-	2 annulatus, Dist 347
maria 329	- annumous, 25161, 011
	1
1. Rhaphidosoma, Amy &	Div 5. Sycanaria 348
Sern	1
Serv	1. Homalosphodrus, Stat . 348
1 atkinsoni, Bergi. 330	1 brachialis, Stat . 349
2 tuberculatum, Dist 330	1 brachialis, Stål . 349 2 depressus, Stål . 349
·	2 depressus, stat 948
n	2 Narsetes, Dist 349
Div 2 Harpactoraria . 331	1 longinus, Dist 350
-	3 Arcesius, Stal 350
1. Lophocephala, Lap 331	1 fragular That 951
7 guerini Tan 831	1. fusculus, Dist 351
1 guerini, Lap 831	4. Sycanus, Amy & Serv . 351
2 Harpactor, Lap 332	l collaris, Fabr 351
1 marginatus, Fabr. 332	2 reclinatus, Dohrn . 352
2 squalus, Dist 333	9 consequitation Dalum 250
3 fuscipes, Fabr 333	3 croceovittatus, Dohrn. 352
4 costaire \$481 994	4 affinis, Reut 353
4 costalis, Stal 334	5 bifidus, Fabr 353
5 marginellus, Fabr 334	6 semimarginatus, Walk. 353
6 reuteri, Dist 835 7. tristicolor, Reut 335	7 villicus, Stål 354
7. tristicolor, Reut 335	0.41 0.01
8 nigricollis, Dall	8 fallem, Stal 354
O mgricome, Dak	9 pyrrhomelas, Walk 355
8 nuginensis, Dist 336	10. versicolor, Dohrn 855
10 pygmæus, <i>Dist.</i> 336 [11 indagator, Stat 855
11 flavus, Dist 386	15
12 longifrons, Stål 337	12 mermis, Dist 356
9 D	13. atrocyaneus, Dist 356
3. Brasticus, Stal 337	14 ater, Wolff 356
1 abdominalis, Reut 338	
2. fuliginosus, Reut 338	T) . 0 er 1
4. Sphedanolestes, Stal 839	Div 6. Yolmaria 357
1 pubinotum, Reut . 339	1 Yolinus, Amy. & Serv 857
2 pulchriventris, Stal . 340	1. conspicuus, Dist 357
3 funeralis, Dist 340	2 Agriolestes, Stal 858
4 indicus, Reut 340	1 melanopterus, Dist 358
5 mendicus, Stal 341	9 Aminahadana 0101 ora
O monutous, view 041	3 Agriosphodrus, Stål 859
6 stigmatellus, Dist 341	1 dohrni, Sign 359

Div 7. Eungorasaria ,	Page . 359	2 fuscipennis, Reut	Page
		3 obcourse Karles	381
1 Cydnucoris, Stal .	361	3 obscurus, Kerby	381
	. 361	4 atricapillus, Dist.	382
2 crocatus, Stal	361	5. wolffi, Leth & Sev	382
2 Macracanthopsis, Reut.	362		
1 nodipes, Reut.	. 362	Div. 10 Pristhesancu-	
3. Euagoras, Burm	363	saria	333
	. 363	1 Pristhesancus, Amy &	
2 fuscispinus, Stal .	364	Serv .	
4 Villanovanus, Dist	364		383
1 dichrous, Stal	364	1 zetterstedti, Stål	383
5 Endochus, Stål .	. 365		
1. nigricornis, Stal	365	Div 11 Polididusaria	384
2 cingalensis, Stal .	366	1 9000000000000000000000000000000000000	004
3 albomaculatus, Stal	366	1 Scipinia, Stat	384
4 atricapillus, Dist	. 367	l horrida, Stål	384
5 umbrinus, Dist	367	2 Irantha, Stal	385
6. carbonarius, Bredd	367		385
	308		386
7. migratorius, Dist .		3 Polididus, Stål	386
8 merula, Dist	368	1 armatissimus, Stål	386
9 subniger, Dist	368	4 Henricohahma, Bredd	387
10 atrispinus, Stål	369	1 typica, Dist	387
11 mornatus, Stat	369	2 montana, Dist .	388
	. 369	3 spinosa, Dist	388
1 angusta, Stål .	370	4 mermis, Dist	389
2. strammipes, Dist.	370	5 gallus, Dist	389
3. maculosa, Dist .	370	ganus, Diec	000
7. Epidaus, Stål	371	{	
1. conspersus, Stal .	371	Subfam. 12. Nabidınæ	389
2 atrispinus, Dist.	372		
3 parvus, Dist .	372	Div 1. Pachynomaria.	390
4 famulus, Stal	872	1 14 T. Euchynomatia.	000
5 booler That	373	1. Pachynomus, Klug	390
5 bicolor, Dist		l biguttatus, Stal	390
8 Brassivola, Dist	373 274	2 alutaceus, Stâl .	391
I. hystrix, Dut.	374		
9 Bartacus, Dist	374	Div 2. Prostemmaria	391
1. spinifex, Thunb	374		
10 Platerus, Dist.	375		392
1 pilcheri, Dist .	875	l carduelis, Dohrn	392
11 Isyndus, Stål	876	2 flavomaculatum, Leth.	393
1 heros, Fabr.	376	2. Allosorhynchus, Fieb	393
2 pilosipes, Reut .	377	1. vinulus, <i>Stål</i>	393
3 ulysses, Stal	377	2 marginalis, Dist	894
4 obscurus, Dall .	377	3 metneri, Stein .	394
12 Rihirbus, Stål .	378	4 bengalensis, Dist	394
1 trochantericus, Stål .	378		395
			305
Div 8 Panthousaria .	379		395
			896
1 Panthous, Stal	379	E Dulandus Dus	398
1 excellens, Stal	379	(O' Tenternas) Tous	396
2 bimaculatus, Dist	380	1. phædrus, Dist	500
<u>-</u>	900	Div. 3 Nabidinaria	397
D _{IV} 9 Coranusaria .	380	D11.0 11 11 11 11 11 11 11 11 11 11 11 11 11	
1 Coranus, Curtis	380		397
1 spiniscutis, Reut	381	1 cribraticollis, Stål	398

Page	Page
2. Dodonæus, Dist . 398	7. Mecistoscelis, Reut 421 1 scirtetoides, Reut 421 2. palpatoi, Kirk 422
1. humeralis, Dist 399	1 scirtetoides, Reut 421
3. Nabis, Latr 399	2. palpatoi, <i>Kirk.</i> 422
1 capsiformis, Germ . 400	
2 tibialis, Dist . 400	Div. 2 Mi, raria 422
3 funebris, Dest	1. Miris, Fabr 428
4. nigrescens, Dist 401 5 brevilineatus, Scott 401	1 atkınsonı, Dist 423
0 220124	1 atkınson, Dist 423 2. Megaloceræa, Fieb 424
	1 grammes, Dut 424
4. Lorichius, Dist	2 antennata, Dist 424
1. umponadus, 19189 . 192	3. elongata, Dist . 425
	3. elongata, Dist 425 4 dohertyi, Dist 426
Fam 13 Saldidæ . 404	3 Materiesius, Dist 420
Subfam. 1 Saldınæ . 404	1 marginatus, Dist 426
-	4. Rhinomiris, Kirk
1. Salda, Fabr 404	I Vicarius, Walk 420
1. Salda, Fabr 404 1. dixoni, Dist 405 2. Valleriola, Dist 405	1 ontonnetum Karby 428
	2 relatum, Dist 428
1 green, Dust 406	3 strammeum, Walk . 428
U.1.C D. Tt	4 rubricatum, Dist 429
Subsam 2. Leptopina 406	5. forsythi, Dist
1. Leotichius, Dist 406	6 hampson, Dist 429
1. glaucopis, Dist 407	7 picturatum, Dist 430
	6 Tancredus, Dist 480
Fam. 14 CEBATOCOMBIDÆ . 408	1 sandaracatus, Dist 430
Zum, 17 Omnacoomprim , 200	7. Combalus, $Dust$ 431
Subfam. 1. Ceratocombinæ 408	1. novitius, Dist 431
1. Crescentius, Dist 408	8 Diognetus, Dist 431
1. principatus, Dist 409	1 intonsus, Dist 432
2. Principator, 2000 1111 200	9 Zanessa, Kirk 482
77 77 0 410	l sangumolenta, Dist 432
Fam 15. CIMICIDÆ 410	Div. 3. Cylaparia 483
1. Cimex, Linn 410	
1 lectularius, Linn 410	1 Pharyllus, Dist 434
2 macrocephalus, Fieb. 411	1 pistacinus, Motsch 434
	2. Argenis, Dist 434 1 incisuratus, Walk 435
Fam 16 CAPSIDÆ 412	2 albovirdescens, Dist . 435
11, 12,	3. Gusardus, Dist
Subfam 1. Merinæ . 414	1. peliucidus, Dist 436
Tum 1 Handamiana 411	4. Prodromus, Dist. 436
Div. 1 Herdoniana 414	1 subflavus, Dist 437
1. Isabellina, Kuk . 415	2 clypestus, Dist 437
1. ravana, Ku by 415	5 sudviriois, Dist 437
2 Onomaus, Diet . 416	5 Angerianus, Dist 437
1 pompeus, Dist. 416	1 fractus, Dist 438
3 Callicratides, Dist. 417	2 maurus, Dist
1 rama, Kurby 417	6. Felisacus, Dist
4. Harpedona, Dist 418 1. marginata, Dist 419	1 magnificus, Dist 438
5 Clapmarius, Dist 419	2 glabratus, Motsch 430 7. Helopeltus, Sign
1 turgidus, Dist 420	7. Helopeltis, Sign
6 Mystilus, Dist . 420	2 thervors, Waterh . 440
1. priamus, Dist . 420	3. oryx, Dist 44

Page	Pag
Eblis, Kirk 442	3 pygmæus, Dist 459
1 amasis, Kirk. 442	4. capitatus, Dist 459
Chilocapsus, Kirk . 442	3. Camptobrochis, Fieb . 460
1. flavomarginatus, Kirk 443	l orientalis, Dist 460
- •	2. lutulentus, Dist 461
	3 umforms, Dist. 461
Subfam 2. Capsinæ 443	4 similis, Dist 461
	4. Hermotinus, Dist . 462
1. Disphinctus, Stal . 443	1 signatus, Dist 462
1 humeralis, Walk 444	5 Gismunda, Dist . 463
2 politus, Walk 444	1. chelonia, Dist . 463
3. dudgeoni, Kirk 445	6 Liocoris, Fieb 468
4 elegans, Dist . 445	1 myittæ, Dist . 464
5 mæsarum, Kerk 445	
2. Malalasta, Dist 446	2 formosus, Dist 464
1 superba, Dist 446	3. partitus, Walk 464
3. Hyalopeplus, Stäl . 447	7. Lucitanus, Dist
1. vitripennie, Stal 447	1 punctatus, Kirby 465
	8. Deræocoris, Kirschb 465
2. spinosus, Dist 447	1. patulus, Walk 466
	2 variabilis, Dist 467
Div. 1. Phytocoraria 448	3 rufus, Dist . 467
	4. ornandus, Dist 467
1. Phytocoris, Fallen 448	9 Capsus, Fabr 468
1 crinitus, Dist 449	1 crossus, Dist 468
2 stoliczkanus, Dist . 449	2 remus, Dist 468
2 Paracalocoris, Dist . 449	3. pegasus, Dist . 469
1. burmanicus, Dist . 450	or population —
2 erebus, Dist . 450	
3 lanarius, Dist . 450	
3 Calocons, Fieb 451	1 simulans, Walk 469
0 000000000	2 testaceus, Dist . 470
	Div. 4 Teratodellaria. 470
O DUCE	459
4 angustatus, Leth . 452	1 Tyraquellus, Dist . 471
	1 albofasciatus, Motsch . 471
Div 2? 458	2. maculatus, Dist 471

1. Mevius, Dist 453	Div 5 Bryocoraria 471
1. lewisi, Dist 453	
•	1. Mertila, Dist . 472
484	1. maiayensis, Dist . 472
Div 3. Capsaria 454	2 Thaumastomiris, Kn l 473
1 Lygus, Hahn 454	1. sanguinalis, Kirk. 473
1 sordidus, Dist 455	
2 albescens, Dist 455	Div. 6. Cyllocoraria 473
3 decoloratus, Dist 455	D 217 - 7 - 7 7
4 viridanus, Motsch . 456	1. Sthenarides, Reut. 474
A 11176(1170)	1 posilla. Reut 475
O publication and a second	2 Nicostratus, Dist 475
O Interest -	1. baltentus, Dest . 475
/ Catalian = 1	3 Cyrtorrhinus, Freb 476
O Discretoral and	1 lividipennis, Reut 476
9. bengalicus, Reut 457	4 Zanchius, Dist 477
10 obtusus, Reut 400	1 annulatus, Dist 477
2. Poeciloscytus, Fieb . 405	5 Gallobelicus, Dist 477
1. longicornie, ttelli	1. crassicornis, Dist . 478
2 consangumeus, Dist 459	1. Charleting, Trut

	Page 478	P	e£0
	478	Subfam 3. Isometopunæ 4	183
	479		184
	479	1 feanus, Dist 4 2. Turnebus, Dist	185
2. IIIIIIodoj III	479	1 cuneatus, Dist 4 3 Sophianus, Dist	185
	480	3 Sophianus, Dist	185
2. Bilia, Dist	480	1. alces, Dist 4	186
	480		
	481		
1. lankana, Kirby	481		
			486
Dry 9 Plagiognatharia	481	Deræocoris rubrovulneratus,	
1. Psallus, Fieb	482	Motsch	
1 singalensis, Dist		D piceoniger, Motsch 4	187
2 Campylomma, Reut	483	Leptomerocoris alboviridescens,	
1 hvida, Reut	483		487

XVII

Order RHYNCHOTA.

Suborder HETEROPTERA.

Family LYGÆIDÆ.

This family is of considerable extent, and is of importance to agriculturists on account of the depredations committed by many of its members. It includes many well-known insect-pests, but the injuries caused by the species of Lygwide to cultivated and indigenous plants are not yet sufficiently understood, and we are likely to hear much more on this subject when the national importance of economic entomology is more generally recognized. The insects are mostly of small size, and (excluding the subfamily Lygwinæ) are of dull and inconspicuous coloration, while the character of micropterism, or abbreviation of the hemelytra, is found in not a few genera. With some exceptions the species are mainly terrestrial, and found under stones, dead leaves, and other rubbish, in moss and in herbage, where they may be captured by sweeping.

The family has also been known under the name of "Inferiornes, Amyot), but is now almost universally

termed Lygæidæ.

Antennæ inserted below a line drawn from the centre of the eye to the apex of the face; ocelli present; corrum without an appendix, membrane generally with four, but not with more than five yeins

In the Catalogue of Lethierry and Severin thirteen subfamilies are enumerated, but nine only can be recognized amongst Indian Rhynchota.

Synopsis of Subfamilies.

A Abdominal segments nearly equally long.

- a. All the abdominal stigmata situate on the connexivum
 - a. Hemelytra not, or very slightly, punctured

b. Hemelytra distinctly punctured

Lygæinæ. Cyminæ.

b Stigmata of one or more abdominal segments ventral in position. a. All the ventral incisures reaching the lateral margins. a'. Stigmata of the sixth segment alone ventral in position Blissina. b' Stigmata of all, or at least of last three, segments ventral in position. a². Head broad, recurved in front of eyes to apex Geocorinæ. b2. Head neither very broad nor recurved in front of eyes to apex. a³. Membrane without basal cells. at. Anterior femora much incrassated and spined beneath: rostrum short, either not extending beyond or only slightly beyond an-Pachygropihina. terior coxæ b4. Anterior femora nòt incrassated: rostrum long, extending considerably beyond Oxycareninæ anterior coxæ . Heterogastrina. b3. Membrane with basal cells b. Third ventral incisure not reaching the lateral margins, near which it is Aphanina. recurved B Abdomen contracted at base; second and Colobathristine. third segments very long

Subfamily I. LYGÆINÆ.

In this subfamily the abdominal segments are nearly equally long, all the stigmata are situate on the connexivum, and the hemelytra are either not or very slightly punctured.

The Lygaina are very widely distributed and comprise the most highly coloured representatives to be found in the whole

family Lygæidæ.

Division LYGEARIA.

Lygmaria, Stál, Ofv Vet -Al. Forh 1872, no. 7, p 40, 1d. En Hem 1v, p 98 (1874)

Hemelytra either totally or to a very considerable extent

fuscous or infuscated, apical margin of comum straight

The Lygaria contain a number of genera which are both necessary and valid, but constructed on characters which are unavoidably of a somewhat superficial character. Most of these genera were founded by Stål, who was the first to really study the group, and although colour differences have been often used

by him as differential characters, all subsequent students and workers have followed and employed his divisions. Many of the genera possess most distinctive facies, but afford few good structural characters that can be used in a differential diagnosis. In small insects of a soft structure this difficulty is frequently found.

Synopsis of Genera.

A Eyes stylated ASTACOPS, p 3 B Eyes not stylated a Base of pronotum sinuate, posterior angles a little posteriorly produced ONCOPELTUS, p. 4 b Base of pronotum straight, posterior angles not produced a. Head not turned behind eyes, which touch, or nearly touch, anterior margin- of pronotum a'. Metapleurae posteriorly straight or somewhat roundly truncate, posterior margin not oblique Orifices black LYGÆUS, p. 5 b' Metapleuræ posteriorly obliquely trun-Orifices red or pale coloured. a2 Head either totally, or mostly, red [p. 14 or pale coloured* a³ Rostrum long; orifices black Pyrrhobaphus, b3 Rostrum of moderate length, [p. 8 orifices red or flavescent GRAPTOSTETHUS, [p 11. b² Head either totally or almost black. a4 Orifices black, body sericeous . ASPILOCORYPHUS. 64 Orifices red or pale, body pilose. LYGÆOSOMA, p. 13 posteriorly externally c'. Metapleuræ strongly produced

b Head turned behind eyes, which are well MELANOTELUS, p 12 separated from anterior margin of proa' Second and fourth joints of antennæ subequal, or fourth shorter than Arocatus, p 15. b' Fourth joint of antennæ distinctly longer than second Cænocoris, p. 16

Genus ASTACOPS.

Astacops, Boisd Voy Astrol, Ent 11, p 637 (1835), Stal, En. Hem 1v, p. 98 (1874)

Type, A. australis, Boisd, from New Guinea

Distribution Malay Archipelago and Australasia A species now described from British India

Eyes stylated; ocelli much nearer to each other than to eyes; scutellum not tumescent, but distinctly carinate; lateral margins

^{*} In Pyrrhobaphus leucurus a variety occurs in which the head is wholly or nearly black

of pronotum anteriorly rounded; pronotum not or obsoletely punctate; first point of the posterior tarsi longer than the two other joints together.

689. Astacops occidentalis, sp n.

Pale sanguineous, sternum and abdomen ochraceous; eyes, about apical third of lateral margins to corium, abdomen above,

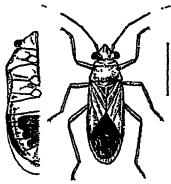


Fig 1 -Astacops occidentalis.

lateral margins of abdomen beneath (excluding base and apex), and disks of third, fourth, and fifth abdominal segments black; legs and antennæ pale sanguineous, membrane fuliginous, first joint of antennæ about reaching apex of head, second joint a little longer than third; rosti um black, basal joint pale sanguineous, apex reaching the intermediate coxæ coxæ and trochanters ochraceous; scutellum with a strong cruciform carination.

Length 12 millim

Hab Sylhet (Vienna Museum)

The first species of the genus as yet recorded from British India.

Genus ONCOPELTUS.

Oncopeltus, Siâl, Hem Fabr i, p 75 (1868), id En Hem. iv, p 98 (1874)
Subg Erythrischius, Siâl, En Hem iv, p. 102 (1874)
Trausvaalia, Dist Nat in Transiaal, Append p 253 (1892)

Type, O famelicus, Fabr, a South-African species.

Distribution Neotropical, Ethiopian, Oriental, and Australasian

Regions.

Body elongate, depressed above; pronotum with the posterior margin sinuate, the posterior angles a little posteriorly produced, the lateral margins and a central carina prominent, the anterior area (apart from the carina) foveate, scutellium slightly tumescent; antennæ four-jointed, moderately robust, rostrum passing the posterior coxæ, corium covering more than two-thirds of the abdomen, membiane passing abdominal apex

Only one species is at present known from British India.

690. Oncopeltus nigriceps, Dall (Lygeus) List Hem 11, p 597 (1852), Leth & Sev (Lygeus) Cat Gén Hém 11, p 157 (1894), id (Oncopeltus) tom cit p 187

Sanguineous; head, anterior area and posterior margin of pronotum, base of scutellum, a transverse central fascia to cornum,

membrane, rostrum, antennæ, anterior area of prosternum, and

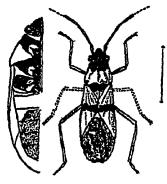


Fig 2—Oncopeltus nigriceps

the larger portion of meso- and metasterna, about apical half of disk and apex of abdomen black; membrane with a basal and discal spot both white.

Var. Head with the base and apex only black; pronotum and corium without any black markings; prosternum sanguineous. meso- and metasterna suffused with piceous.

Length $9\frac{1}{2}$ to 10 millim.

Hab. North Khásı Bombay (Dixon). (Chennell); Trivand um.

Usually found in the Nidoong trees (Euphorbia nernifolia, Linn.). R. M. Dixon in litt.

Genus LYCEUS.

Lygeus, Fabr. (pro parte) Ent Syst. iv, p 133 (1794); id. Syst. Rhyng p. 203 (1803), Sill, Ofv Vet -Ak Forh 1872, n 7, p 41; id En. Hem iv, p 99 (1874)

Lygæosoma, Fieb (pro parte) Eur Hem. pp. 45 & 167 (1861). Lygæodon, Puton, Ann Soc. Ent Fr 1869, p. 189.

Subg Melanospilus, Stalagmostethus, Spilostethus, Graptolomus, Micropsilus, Melanostethus, Melanerythrus, Stal, Hem. Fabr. 1, pp 72, 73, 75, & 76 (1868)

Subg Cosmopleurus, Melanocoryphus, Stal, Ofv Vet.-Al. Forh.

1872, n 7, p 41

Subg Hæmobaphus, Melanopleurus, Craspeduchus, Ochrostomus, Ochrimus, Stäl, En. Hem iv, pp 104, 105, & 113 (1874).

Subg. Eulygæus, Reut Act Soc. Fenn xv, 1888, p 180

Subg Tropidothorax, Berg. Ann Soc Ent Belg xxxvii, p. 547 (1894)

Type, L militaris, Fabr.

Distribution A very extensive genus, almost universally distributed, largely represented in tropical America. Only six species are at present recorded from British India.

Lygaus differs principally from the preceding genus (Oncopelius) by having the posterior margin of the pronotum straight; the scutellum more or less distinctly carinate from about middle to

apex; the clavus posteriorly is subampliated.

A number of subgenera have been proposed, which really represent sections of a somewhat comprehensive genus, always possessing distinct common characters, though frequently exhibiting a more or less divergent facies The species found in British India, however, are of a typical and little divergent character.

a Femora spined beneath.

691. Lygwus militaris, Fab: (Cimex) Syst Ent p. 717 (1775), id

Ent Syst iv, p 147 (1794), pro syn cf. Leth & Sev Cat Gén

Hém ii, p 144 (1894)

Lygwus elegans, Wolff, Ic iii, p 112, f 106 (1802)

Var civilis, Fabr (Cimex) Mant iii, p 298 (1787)=militaris,

Herr.-Sch Wanz. ix, p 198 (1853)=lagenifer, Duf Rech Hém

pp 45, 282, pl. iii, ff 22-24 (1833)

Var surmamensis, Wolff, Ic iii, p 111, f 105 (1802)

Var asiaticus, Kolenati, Melet Ent ii, p 72, pl viii, f 12 (1845).

Pale sanguineous, apex of head and a spot at inner margins of eyes, antennæ, rostrum, pronotum (with the central anterior margin connected with two long arcuated fasciæ reaching posterior margin near lateral angles), scutellium, a small spot near apex of clavus, a transverse fascia (sometimes abbreviated) to corium, prosternum, margins of meso- and metasterna, abdominal segmental margins and stigmatal spots, and the legs black; membrane pale brownish-ochraceous, some of the basal veins black, and usually with a white spot at base, and two, sometimes coalescing, about middle Femora distinctly spined beneath, rostrum reaching the intermediate coxe.

A very variable species throughout its wide distribution; the pronotum has usually two large obscure ochraceous spots on basal area, while the membrane is also highly variable in hue, but seems constant, as described above, in the Oriental examples.

Length 13 to 16 millim.

Hab. Punjab; Murree (Stoliczka); Hardwar (Wood-Mason); Bombay (Letth & Dixon); Bangalore (Cameron). Mysore (Coll Dist). Burma, Mandalay (Fea), Minhla (Comotto)—Found in the Malay Archipelago and Australia (Queensland, Coll Dist); a common Palæarctic species and abundant in South Africa

p Femora unarmed

692 Lygæus hospes, Fabi



Fig. 3 - Lygeus hospes

Ent Syst 1v, p 150 (1794), 1d Syst
Rhyng p 219 (1803), Stål, Hem
Afr 11, p 136 nota (1865)
Lygæus affins, Wolff, Ic 111, p 110,
f 104 (1802)
Lygæus lano, Herr-Sch Wanz vii,
p 21, f 705 (1844), et ix, p 197
(1853)
Lygæus squaldus, Monti & Sign Ann
Soc Ent Fr 1861, p 66
Var familiaris, Fabi (pro parte) Spec.
Ins 11, p 363 (1781)

Pale sanguineous; apex of head and a spot at inner margins of eyes, antennæ, rostrum, two broad central discal fasciæ to pronotum

(narrowed anteriorly and connected with an anterior marginal

fascia), scutellum (excluding apex, apex of clavus, and outer claval margin), a large central spot to corium, membrane, disks of sternum and abdomen, and legs black. Body finely pilose; rostrum passing the posterior coxe; femora unarmed

Length 10 to 13 millim.

Hab. Sind, Bombay, Madras (Coll. Dist.); Bangalore (Cameron), Nilgiri Hills (Hampson); Ceylon (Green), Burma; Mandalay, Bhamo (Fea)—This species is found in China and throughout the Malayan Archipelago; also in Australia (Queensland, Coll. Dist.), and is recorded from New Caledonia.

693 Lygæus equestris, Linn (Cimex) Faun Suec p 253 (1746), id. (Cimex) Syst. Nat ed. xii, p 726 (1767), pro syn. ct Leth & Sev Cat Gén Hém ii, p 141 (1894)

Pale sanguineous, sometimes ochraceous; apex of head, a spot at inner margins of eyes, antennæ, rostrum, anterior area of pronotum terminating in two discal spots, posterior pronotal margin (not reaching lateral angles), scutellum, apical area of clavus, an irregular transverse fascia to corium, membrane, head beneath, sternum, legs, four longitudinal series of abdominal spots (two central and two lateral), and abdominal apex black; the black area of the sternum has six deeper black spots on each side; membrane with a basal and two discal white spots, the apical margin of the same colour, posterior lateral margin of the prosternum sanguineous. Rostrum passing the intermediate coxæ; femora unarmed.

Length 11 to 12 millim.

Hab. Punjab; Murree (Stoliczka)—A common Palæarctic species and found both in China and Japan.

The specimen from Murree is an ochraceous variety.

694. Lygæus dohertyi, sp. n

Reddish-ochraceous; head, antennæ, rostrum, anterior area of pronotum (bilobed posteriorly), two large transverse spots on posterior pronotal margin, scutellum, apical half of clavus, a large discal obliquely curved spot to corium, membrane, sternum, legs, broad segmental margin and apex to abdomen black; posterior lateral margin of prosternum reddish-ochraceous; membrane with very obscure and narrow basal and discal greyish spots Rostrum reaching posterior coxæ; femora unarmed.

Length 14 millim

Hab. Burma; Karen Hills (Doherty).

695. Lygæus fimbriatus, Dall List Hem 11, p 546 (1852), &&l (Melanospilus), En Hem 1v. p 104 (1874)

Reddish-ochraceous; apex and two large basal spots to head, antenne, rostrum, two large spots on posterior area of pronotum sometimes preceded by two very small and obscure spots, clavus

(excluding apex), a large central marginal spot to corium, membrane a sublateral sternal and abdominal segmental series of shining spots (connected on abdomen with broad segmental fasciæ), abdominal apex, and legs black; apical margins of membrane narrowly greyish. Bostrum reaching posterior coxæ; femora unarmed

Length 7 to 8½ millim.

Hab. Assam, Margherita (Doherty), North Khási Hills (Chennell); Burma Bhamo, Schwego Myo (Fea).—Described from Java, and recorded from the Philippines

696. Lygæus autolycus, sp n

Ochraceous; a large triangular spot at base of head, two large spots on posterior pionotal margin united at their bases, margins of lateral angles, scutellum, a spot before apex of clavus, a large central marginal spot to corium, membrane, a lateral spot to pro-, meso-, and metasterna, apical abdominal segment, legs, antennæ, and rostrum black; apex of membrane narrowly greyish-white. Rostrum just passing the intermediate coxæ; femora unarmed

Length 10 millim

Hab Burma; Karennee.

This, like the preceding species (*L fimbriatus*), belongs to the subgenus or section *Tropidothorax*, Bergr. (*Melanospilus*, Stål).

Genus GRAPTOSTETHUS.

Graptostethus, Stal, Hem Fabr i, p 73 (1868); id Ofv Vet-Ak Forh 1872, n 7, p 42; id En Hem 1v, p. 99 (1874)

Type, G. servus, Fabr.

Distribution. Palæarctic, Ethiopian, and Oriental Regions
Antennæ moderate in length, about one half the length of the
body, the second and third joints subequal in length, or second
longer than third; rostrum moderate in length, the first joint
reaching or just passing the anterior margin of the prosternum,
pronotum with the posterior margin straight, a central carina
absent or subobsolete; scutellum beyond middle obtusely carinate,
posterior margin of metasternum obliquely truncate, its posterior
angles acute, their apices rounded, femora unarmed

697. Graptostethus servus, Fabr (Cimex) Mant. 11, p 300 (1787);

1d (Lygeuis), Ent Syst 1v, p 156 (1794), Dist A. M N H

(7) vii, p 537 (1901), pro syn cf Leth & Sev Cat Gén Hém

11, p 148 (1894)

Lygeuis incomptus, Herr-Sch Wanz viii, p 104, f 875 (1848),

12 tix, p 196 (1853)

Lygeuis ornatus, Uhler, Proc Ac. N & Philad 1860, p 227.

Lygeuis inequalis, Walk Cat Het v, p 57 (1872)

Var maculicollis, Germ Faun Ins Europ p 24 (1817)

Var nigriceps, manillensis, Stål, En Hem iv, p 117 (1874)

Pale obscure sanguineous, pilose, apex and sometimes the

whole central area of head, a small spot at inner margin of eyes, a transverse anterior fascia and two angulated subbasal fasciæ

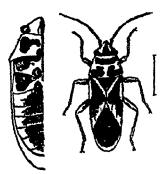


Fig &-Graptostethus servus

(sometimes connected) to pronotum, scutellum, a large oblique subclaval spot and a smaller marginal spot (sometimes fused) to corium, membrane, a large irregular spot on the lateral area of each steinal segment, abdomen (excluding margins), legs, antennæ, and rostrum black; basal spot and apical margin to membrane greyish Rostrum about reaching the posterior coxæ

Var. The angles detached from the two subbasal fasciæ to the pronotum, thus forming two small rounded spots situate between the

anterior and posterior transverse fasciæ, the apical margin of the corium is often pale ochraceous

Length 8 to 9 millim.

Hab. North Khási Hills (Chennell), Bombay (Leth); Bor Ghát (Dixon); Calcutta (Atkinson); Bangalore (Cameron), Nilgiri Hills (Hampson); Trivandrum; Ceylon (Green). Burma. Bhamo, Karennee, Temzo (Fea)—Distributed throughout the Malayan Archipelago to Australasia; recorded from China; found in the South Palæarctic Region; common in South Africa.

698 Graptostethus argentatus, Fabr (Lygeus) Syst Rhyng p 228 (1803), Dall. List Hem 11, p. 545 (1852), Stal, Hem. Fabr 1 p 74 (1868)

Head, pronotum, and steinum pale purplish-red; antennæ, rostrum, eyes, a small spot near each of the ocelli at base of head, two small spots near anterior maigin and two much larger spots near posterior margin of pronotum, and a spot on the lateral areas of each sternal segment black; scutellum, corium, abdomen beneath, and legs pale brownish-piceous; lateral margins and apex of scutellum, and bases of lateral margins of corium, pale purplish-red; membrane glossy black, its apical margin, small spots at base and sides, and apical margins of corium greyish-white, rostrum reaching posterior coxæ

Length 7 to 74 millim.

Hab. Bengal (Stockholm Mus.); Bombay (Letth); Nilgiri Hills (Hampson), Ceylon (Green & Lewis). Burma; Karennee (Fea)

699. Graptostethus quadratomaculatus, Kirby (Lygeus), J. Linn Soc, Zool xxiv, p 98 (1891); Dist A M N H. (7) vu, p 587 (1901)

Allied to the preceding species (G. argentatus), but differing in

the following characters:—Apex of head and two spots at base black, two anterior transverse spots and two very large basal subquadrate spots to pronotum black; scutellum with central carina red, corium with basal margin concolorous, not red, a round spot near each apical area of clavus and a similar discal spot to corium black, membrane unspotted, its apical margin greyish, two black spots on the lateral areas of each sternal segment

Length 7 millim

Hab. Ceylon (Green & Lewis)

700 Graptostethus trisignatus, Dist A M N. H (5) m, p. 130 (1879)

Red; rostrum, antenuæ, eyes, a narrow transverse patch (divided into two in a second specimen) at base of head, two large subglobular spots at base of pronotum, scutellum, membrane, apical segment of abdomen, legs, and a spot on the lateral areas of each sternal segment black, apical margin of membrane grayish-white, rostrum considerably passing the posterior coxæ, the basal joint extending some little distance beyond the anterior margin of prosternum; second joint of antennæ much longer than third.

Length 72 to 10 millim.

Hab Nága and North Khási Hills (Chennell) Burma; Rangoon (Fea)

701 Graptostethus quadrisignatus, Dist. A M N H. (5) ni. p 190 (1879)

Red; rostrum, antennæ, eyes, apex of head, anterior margin of pronotum (broadest on disk and not quite reaching lateral margins), an angulated fascia near each pronotal lateral angle, scutellium, membrane, disk of apical abdominal segment, legs, and four spots on each lateral area of sternum (two on prosternum, one on mesosternum, and one on metasternum) black; apical margin of membrane greyish-white, the basal joint of the rostrum only just passes the anterior margin of the prosternum; second joint of antennæ a little longer than third.

Var Disk of corium and central area of abdomen beneath

piceous

Length 10 to 11 millim

Hab North Khasi Hills (Chennell), Nilgiri Hills (Hampson)

702 Graptostethus dixoni, sp n

Head black, the lateral margins above pale red; pronotum pale red, with two large central black discal fasciæ, largely transversely widened anteriorly and posteriorly, and almost reaching the anterior and posterior margins; scutellum black, its apical carina red, corium pale brownish-red, its lateral margin and the inner claval margin pale red, membrane black, with a long transverse

discal white spot and its apical margin greyish; sternum reddishochraceous, abdomen pale red; a deep shining black spot on the lateral areas of each sternal segment, antennæ, rostrum, head beneath, auterior areas of sternal segments, lateral abdominal spots, apical abdominal segment, and legs piceous; second joint of antennæ a little longer than third.

Length $6\frac{1}{2}$ millim.

Hab. Bombay; Khandálu (Dixon).

703. Graptostethus maculatus, Dall (Lygeus) List Hem. 11 p 545 (1852); Dist A M. N H. (7) vii, p. 537 (1901)

Reddish-ochraceous, a large spot (varying in size) between eyes, two very large rounded spots on basal area of pronotum, scutellum, a small spot beyond middle of clavus, a large central rounded spot to corium, membrane, a lateral spot on each sternal segment, and the abdominal apex black, legs, rostrum, and antennæ piceous; basal joint of rostrum and apical carination to scutellum reddish-ochraceous; second joint of antennæ a little longer than the third

In some specimens there is, as described by Dallas, a black spot

on the anterior area of the pronotum.

Length 8 millim

Hab. "North India" (Brit. Mus.). Narkanda (Atkinson).

Genus ASPILOCORYPHUS.

Aspilocoryphus, Stål, En Hem 1v, p. 99 (1894)

Type, A. fasciativentris, Stal, an African species

Distribution Ethiopian, Oriental, and Australasian Regions.

This genus is closely allied to Graptostethus, Stål, and is separated on valid but rather superficial characters. In Graptostethus the head is either totally or nearly red, or at least possesses a red spot, and the odoriferous orifices are red or luteous; in Aspilocoryphus the head is black, without any pale spot at base, and the orifices are black, the body is sericeous

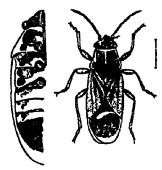


Fig 5 - Aspilocoryphus guttiger

704 Aspilocoryphus guttiger, Dall. (Lygœus) List Hem. 11, p 547 (1852)

Dull testaceous; head (excluding lateral margins), basal area of pronotum attached to two large discal longitudinal fasciæ, scutellum excluding apex, a lateral spot attached to a transverse fascia on each sternal segment, obscure marginal spots, segmental margins and apex of abdomen black, legs, antennæ, and rostrum piceous; behind each ster-

nal black spot is a smaller, darker, velvety-black spot, membrane

piceous, with an arcuated fascia near base and the apical margin white. Antennæ with the second and fourth joints longest; third a little longer than first.

Length 7 millim.

Hab. North Bengal (Campbell, Brit. Mus.)

705. Aspilocoryphus mendicus, Fabr (Cimex) Syst Ent p. 720 (1775), sd (Cimex) Mant. 11, p. 300 (1787), Stdl (Lygenus), Hem. Fabr i, p. 74 (1868).

I have not seen this species; Stal has thus described it.—

Testaceous, remotely greyishly sericeous; central lobe and a large spot at base of head, antennæ, rostrum, four large spots arranged in two series to pronotum, scutellum, membrane, a large spot on each lateral area of the sternal segments, a small spot in the basal angles of all the abdominal segments, and an abbreviated apical fascia to the third, fourth, and lifth segments, the anal appendage and sixth segment, and legs black; a small shining black spot to the sternum "subbasali media laterum partium"; two small obscure spots and apical central carina to scutellum testaceous, an anterior fascia internally abbreviated, and the apical margin to membrane, white; the first joint of rostrum produced a little beyond base of head.

Length, 2, 7 millim.

Hab. "India Orientalis. Dom. Daldorff" (Copenhagen Mus.)

Genus MELANOTELUS.

Melanotelus, Reut. Rev d'Ent 1v, pp. 200 & 202 (1885)

Type, M argillaceus, Reut, from the Mauritius

Distribution Southern Palmarctic, Ethiopian, Oriental, and

Australasian Regions.

Dr. Reuter apparently relies on the following characters to separate this genus from *Graptostethus* and its allies .—" Hemelytra narrower than the abdomen, abdomen testaceous or sanguineous, the sixth and anal segments black, the posterior angles of the

metapleuræ externally strongly produced."

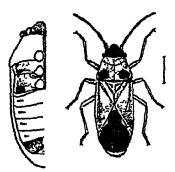


Fig 6 -Melanotelus bipuncialus

706 Melanotelus bipunctatus, Dall (Lygœus) List Hem 11, p 547 (1852), Reut Rev d'Ent 1v, p 203 (1885)

Dull reddish, greyishly pilose, head, a spot near each basal angle of the pronotum, membrane, a spot on lateral area of each sternal segment, and apex of abdomen black, antennæ, rostrum, and legs piceous; membrane with the apex,

a basal spot, and a spot at apical margin of corium white

Var. a. Scutellum with two small black discal spots.

Var. b. Head testaceous, its base infuscated.

Length 6 to 7 millim.

Hab Bombay (Coll Dist.). Burma, Rangoon, Palon, Karennee, Temzo, Mandalay (Fea)

Genus LYGÆOSOMA.

Lygeosoma, Spin. Ess p 254 (1840); Fieb (part) Eur Hem p 45 (1861), Stal, Ofv Vet-Ak Forh 1872, n 7, p 42; Reut Rev d'Ent 1v, p. 205 (1885).

Type, L. reticulatum, Herr.-Schaef., a Palæarctic species.

Distribution. Nearctic, Palearctic, Ethiopian, and Oriental Regions. The position of this genus will be best understood by a reference to the Synopsis of Genera given on p. 3. The body is sometimes very distinctly pilose and the orifices are red or luteous, the anterior area of the pronotum is usually distinctly, sparsely punctate, but sometimes too pilose for the punctuation to be clearly visible, it is also subobsoletely centrally carmate; the apex of the scutellum is laterally and prominently produced, the eyes are not separated from the anterior pronotal angles.

707. Lygæosoma orientale, sp. n.

Head, pronotum, scutellum, and membrane piceous; a spot at

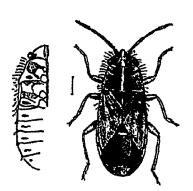


Fig 7.—Lygæosoma orientale

base and near apex of head. anterior and lateral margins and a central fascia to pronotum, and apical central fascia to scutellum pale reddish; corium obscure testaceous, with three pale spots in longitudinal series: body beneath pale reddish, lateral spots to sternum and femora piceous, rostrum and antennæ fuscous-brown. Body above strongly pilose, the hairs very long on lateral margins.

Length 4 millim.

Hab. Bengal; Ranchi (Irvine).

708. Lygeosoma pusillum, Dall (Arocatus) List Hem. ii, p. 550 (1852)

"Head black; pronotum red, rather strongly punctured, with two large dark brown spots on the posterior margin, scutellum blackish, with a pale central line, corium brown, with the nervures and the posterior margin testaceous; membrane deep black, with the tip whitish; margins of the abdomen banded with brown or black and white; abdomen beneath yellow, with an abbreviated brown band on each side of each segment, the apex black or dark brown; sternum red, punctured, with the edges of the segments testaceous; femora pale testaceous at the base, dark brown at the apex; tibiæ and tarsi brownish; rostrum black. antennæ dark brown or blackish, with a whitish ring at the apex of each of the first three joints." (Dallas)

Length 4 millim.

Hab. India (Wooley's Coll., Brit. Mus). Burma; Karennee (Fea).

Genus PYRRHOBAPHUS.

Pyrrhobaphus, Stal, Hem Fubr 1 p 73 (1868), id En Hem p 99 (1874)

Type, P. leucurus, Fabr.

Distribution. Oriental, Malayan, and Australasian Regions.

Antennæ long, moderately robust, second and fourth joints longest; rostrum long, passing the posterior coxe, the first joint almost extending to the anterior cove. pronotum with a partially obsolete central carma, basal margin straight; scutellum apically centrally carmate, metasternum posteriorly obliquely subsinuately truncate, its posterior angles acutely rounded, femora unarmed

709. Pyrrhohaphus leucurus, Fabr (Cimex) Mant. ii, p 299 (1787), id (Lygieus) Ent. Syst. iv, p 154 (1794), Dall (Lygieus) List Hem 11, p 535 (1852), Stât, Hem Fabr 1, p 73 (1868), Dist. A M N H (7) 1x, p. 45 (1902)

Melamphaus rubidus, Walk. Cat Het vi, p 14 (1873)
Var tyrannus, Bredd. Mitt Nut Mus Hamb xvi, p 173, t. 11, f 6

(1899)

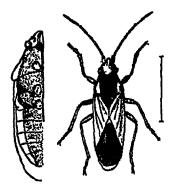


Fig 8 - Pyrrhobaphus leucurus

Black: base of first joint of antennæ, head, posterior latera areas of pronotum, and the corium dark sangumeous, basal angle and apical margin of membrane greyish white; posterior lateral areas of prosternum and metasternum, lateral areas of head beneath, and lateral abdominal margins sanguineous.

Var. Head almost or wholly

black.

Length 14 to 15 millim Hab Trivandrum (Coll. Dist) Ceylon (Thwaites) - Scattered throughout the islands of the Malayan Archipelago, found in

some of the Pacific Islands, common in New Hebrides (Coll Dist.)

Genus AROCATUS.

Arocatus, Spin Ess p. 257 (1840); Fieb. Eur Hem. pp. 45 & 167 (1861), Still, Öfv Vet-Al. Forh 1872, n 7, p 42, id En Hem iv, p 99 (1874)

Tetralaccus, Fieb. Eur Hem p 44 (1861)

Type, A. melanocephalus, Fabr, a Palæarctic species.

Distribution. Palearctic, Ethiopian, Oriental, and Australasian

Regions

Posterior margins of eyes somewhat widely separated from the anterior pronotal angles; head moderately tumescent; pronotum punctate; second and fourth joints of the antennæ subequal in length, or fourth a little shorter than the second; body elongate.

A Palæarctic genus, represented in the Ethiopian, Oriental, and

Australasian Regions.

710. Arocatus pilosulus, Dist. Tr E S 1879, p. 123; id. Sec. Yark
Miss, Rhynch p 9, fig. 5 (1879)

Testaceous, pilose; head with the central portion black;

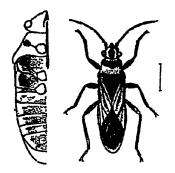


Fig 9 -Arocatus pilosulus

antennæ black, pilose, second joint rather longest, third and fourth joints subequal in length; rostrum piceous; pronotum obscurely punctured, distinctly rugulose on posterior area, anterior lobe with a transverse black fascia and a similar but more obscure basal fascia; scutellum piceous, the apex red, and with two large basal foveæ; membrane piceous, opaque, its apical margin greyish; body beneath testaceous, suffused with piceous; a black lateral spot on each sternal segment; legs piceous, pilose.

Length 6 millim.

Hab. Punjab; Murree (Stoliczka).

711 Arocatus sericans, Stal (Lygeus), Freg Eug Resa, Ins Hem. p 240 (1859), 1d En Hem 1v, p 116 (1874)

Black, margins of head (excluding extreme apex), anterior and lateral margins and a central fascia to pronotum, central fascia to scutellum, basal lateral margins to corium, connexivum, head beneath, lateral margins of sternum and abdomen, and transverse segmental suffusions to sternum and abdomen sanguineous, a piceous lateral spot on each sternal segment; body finely pilose; pronotum posteriorly distinctly punctured; membrane piceous, its apical margin pale fuliginous.

Length 7 to 8 millim.

Hab Pondicherry (Coll. Signor et) - China; Japan (Lewis).

Genus CÆNOCORIS.

Cænocoris, Fieb Eur. Hem. pp 44 & 166 (1861), Stål, Ofv Vet -Al. Forh. 1872, n. 7, p. 43, id En Hem. iv, p. 99 (1874).

Type, C. nerri, Germ.

Distribution Palmarctic, Ethiopian, Oriental, and Australasian

Regions.

Allied to the preceding genus (Arocatus), but differing by having the fourth joint of the antennæ distinctly longer than the second, the other distinguishing characters are of secondary importance.

In distribution Canocoris, unlike Arocaius, is only represented in the Palearctic Region, and is an Oriental genus, recorded also from the Ethiopian and Australasian Regions.

712 Conocoris neril, Germ (Lygons) Faun. Ins Europ. p 24 (1817), Fieb Eu Hem p 166 (1861), Puton, Synopsis, 1878, p 13, Dist A M. N H (7) vii, p 539 (1901)
Lygeus semirubes, Wall. Cat Het 1, p 58, n 147 (1872)

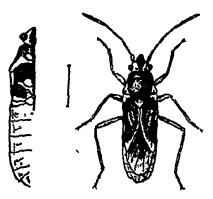


Fig 10 - Canocoris nern

Piceous, lateral areas of head at the regions of the eyes, lateral angles of the pronotum, apex of scutellum, basal angles and inner and apical margins of cornun, and body beneath sangumeous; large lateral spots to each sternal segment and a double series of discal spots to abdomen black, body, legs, and antennæ pilose, membrane black, its apical margin pale fuliginous

Length 71 to 9 million Hab. Sind (Coll Dest).

"Hindostan" (Bitt. Mus) -- A well-known Palæarctic species

713 Conocoris marginatus, Thunb (Aljdus) Hem 10sti Cap in, p 3 (1822), Stal (Tetralaceus), Beil ent Zeitschi x, p 163 (1866), id In Hem iv, p 116 (1874) Crenocoris dudgeom, Kul. Wien ent Zeit xxii, p 17 (1903)

Sangumeous, greyishly pilose, antennæ, rostrum, a spot at base of head (sometimes occupying the whole central area), disk of pronotum, scutellum (excepting apex), clavus, and sometimes the whole of corium (excepting lateral margin), body beneath, and legs piceous, lateral margins of sternum and abdomen and sometimes transverse fascice to abdominal segments sanguineous, menibrane violaceous-black, the apical margin pale hyaline

Var Legs testaceous, abdomen beneath pale sanguineous, its

apical area infuscated.

NYSIUS. 17

Length 10½ to 14 millim

Hab. Kangra Valley (Dudgeon) Ceylon (Green). Tenasserim; Plapoo (Fea).—China (Stockholm Mus).

714. Cænocoris nicobarensis, Mayr, Verh. z.-b Ges Wien, xv, p. 486 (1885); id Reise Nov, Hem p 127, t ni; fig 30 (1886).

"Dull sanguineous, antennæ, rostrum, basal angles of scutellum, apical area of clavus, internal area of corium, abdomen (lateral sanguineous margin excepted), and legs black, membrane shining violaceous, its margins greyish white, acetabula and trochanters pale flavous; basal joint of antennæ passing apex of head; lateral margins of the pronotum distinctly sinuated at middle." (Mayr.)

Length 9 to 10 millim.

Hab. Nicobar Islands, Sambelong

I have not seen this species

Division ORSILLARIA.

Orsillaria, Stall, Ofv. Vet.-Ak Forh 1872, no 7, p 43, En. Hem 1v, p 98 (1874)

Hemelytra-either colourless or greyish-subhyaline; apical margin of corium near apex of clavus sinuate.

The genus Orsillus, which is the foundation for the name of this division, is at present known only from the Palearctic Region.

Genus NYSIUS.

Nysius, Dall. List Hem. ii, pp 331 & 551 (1852); Stål, En Hem. iv, p 119 (1874); Horv Rev d'Entom ix, p 185 (1890) Cymus, subg Artheneis, Flor, Rhynch Livl i, p 287 (1860) Subg Rhypodes, Stål, Hem Fabr i, p 76 (1868)

Subg. Nithecus, Anorthus, Horv Rev. d'Ent ix, pp 187 & 190

Subg. Macroparius, Ortholomus, Stal, Ofv Vet -Ak. Förh 1872, n 7, p. 43

Type, N zealandicus, Dall, from New Zealand and Tasmania Distribution Almost universally distributed.

Head triangular, rather broad; eyes prominent, projecting beyond the anterior angles of the pronotum; basal joint of the antennæ a little shorter than the head, second generally longer than the third, rostrum reaching or nearly reaching the posterior coxe, basal joints not extending beyond base of head; body oblong, membrane with five veins, the two inner ones transversely united; anterior femora unarmed.

I can enumerate only three species from British India, and many more cannot be anticipated; as although the genus is widely distributed, its species also have a wide range, and in no area, beyond the Palearctic, do they appear to be numerous, though individuals are abundant.

YOL. II.

715. Nysius ceylanicus, Motsch. (Heterogaster) Bull. Soc Nat Mosc. 1863, p 78.

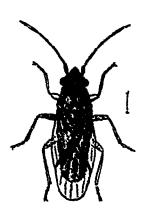


Fig 11
Nysius ceylanicus

Head, antennæ, anterior area of pronotum, and scutellum piceous, posterior area of pronotum ochraceous, coarsely brownly punctate; corium very pale ochraceous, subhyaline, the veins a little spotted, and the apical margin with three distinct, oblong, fuscous spots; membrans pale hyaline; body beneath piceous, posterior sternal segmental margins and apical discal area of abdomen ochraceous; legs ochraceous, femora spotted with fuscous, bases and apices of tibiæ and apices of tarsi fuscous

Length 3 to 4 millim

Hab. Sikhim; Mungphu (Atkinson). Bengal; Ranchi (Irvine) Ceylon (Green & Lewis)

716. Nysius dohertyi, sp n

Pale ochraceous, head and pronotum somewhat coarsely punctate, head with two central black fasciæ; antennæ with the first joint (excluding base and apex), base and apex of second joint, and the whole of third and fourth joints piceous; pronotum with four longitudinal black fasciæ, of which the two central are widest and most pronounced; scutellum blackly punctured, the bassl angles, a central fascia, and apex luteous, levigate; corium uniformly very pale ochraceous, subhyaline, clavus and inner area infuscated, posterior margin with two elongate fuscous spots, membrane very pale ochraceous hyaline: head beneath and sternum coarsely blackly punctate, about bassl half of abdomen black, femora finely spotted with fuscous

Length 3 millun.

Hab. Tenasserim Valley; Myitta (Doherty).

717. Nysius inconspicuus, sp n.

Head, pronotum, and scutellum pale reddish-ochraceous, coarsely punctate, head somewhat infuscate; pronotum with a transverse fascia near anterior margin and the lateral angles piceous: scutellum with the punctures and a basal suffusion more or less piceous; corium pale creamy-white, opaque, some spots on veins and apical margins pale fuscous; membrane pale shining hyaline: body beneath ochraceous, sternum and base of abdomen much suffused with piceous, legs ochraceous, large coarse punctures to femora and the apices to the tarsi piceous; antennæ very pale castaneous, the apical joint a little infuscate, pronotum with a central anterior carination which passes only a little beyond the transverse fascia, scutellum with a central carination which

ninus. 19

commences about one-third from base, where it is thickest, somewhat tuberculous, and generally black.

Length 3 millim.

Hab. Bor Ghát (Dixon).

Species of Lygminm recorded from India but not included in this volume.

Lygous trustriatus, Herr.-Sch. Wanz. ix, p. 196 (1853).

Lethierry and Severin in their Catalogue (t. ii, p. 157) refer to this species under the name *L. tristrictus*, and give the habitat as "India" Herrich-Schaffer, however, gave no locality, though Stäl (En. Hem. iv, p. 118) also records it among his doubtful species as from "India orientalis." The short description without dimensions renders this diagnosis of no specific value.

Lygous pallipes, Wolff, Icon. iv, p. 147, fig. 141 (1804).

A small species of which the hubitat "India orientalis" is given, but of which, like previous writers, I have no knowledge.

Nysus subcinctus, Walk. Cat. Het. v, p. 70 (1872).

Walker gave Ceylon as the locality for this species, but the type is no longer to be found in the British Museum, and under these circumstances the descriptions of this writer are ignored.

Nysius pallipennis, Walk. Cat. Het v, p. 71 (1872).

The same remarks apply to this as to the preceding species.

Subfamily II. CYMINÆ.

This subfamily is to be primarily differentiated from the Lygwins by the character of the distinctly punctured hemelytra.

The subfamily Cymins embraces only a small number of genera and species, but we probably know but little of its true extent; the insects are small and are usually only obtained by sweeping herbage, a process hitherto little followed by tropical collectors.

Synopers of Genera.

A Claval suture not dustinctly longer than scutellum, antennæ more than half the length of body . Ninus, p 19 B Claval suture longer than scutellum, antennæ not

half the length of body Cymus, p 21

Genus NINUS.

Ninus, Stal, Freg Eug Resa, Ins Hem p 252 (1859), Dist. Biol. Centr-Amer, Rhynch vol 1, p 191 (1882).

Type, N. unsignus, Stäl, from the Island of Guam.

Distribution Neotropical and Oriental Regions; also recorded from Guam and the Seychelles.

Body elongate, subparallel, head trangular, broader than the anterior margin of the pronotum, and widest at the region of the eyes which are exserted; antenno shorter than the body, basal joint short, not passing apex of head, second and fourth joints subequal in length, pronotum constricted near middle, broadest posteriorly, lateral angles rounded, scutellum triangular; hemelytra longer than the body, a little sinuate near base and ampliated posteriorly; membrane with longitudinal veins, legs unarmed, claval suture not distinctly longer than the scutellum.

718. Ninus assamensis, Dist A. M N. H (7) vin, p 465 (1901)

Head piceous, greyishly pubescent, especially at apex; antennæ

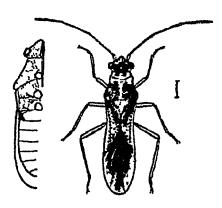


Fig 12 -Ninus assamensis

pale chocolate-brown, finely pilose, pronotum greyish, darkly punctate, two small rounded spots near anterior margin and two very large basal spots (narrowly inwardly divided and anteriorly emarginate) chocolate-brown, between the two series of spots are two transverse black lines, scutellum greyish, darkly punctate, somewhat blackish on lateral margins: corium pale greyish ochraceous, brownly punctate, the lateral margin pale impunctate, a piceous patch at inner

angle, a black spot at apex, clavus chocolate-brown, membrane pale brownish ochraceous, its discal area dark brown, reflecting the abdomen beneath: head beneath and sternum dull greyish, darkly punctate; abdomen piceous, greyishly pilose; legs and rostrum brownish ochraceous, the last with its apex piceous

Length 4, millim

Hab. Assam; Margherita.

719 Ninus discessus, Dist A. M. N H (7) viii, p 466 (1901)

Dull ochraceous; head, apical joint of antennæ, anterior area of pronotum, scutellum, and clavus much darker in hue; a longitudinal spot on each side of the posterior disk of pronotum piceous, apex of scutellum greyish, corium semihyaline, margins of clavus and corium ochraceous, two minute spots at claval apex, a small spot about centre of lateral margins, and the apical angle piceous, membrane pale ochraceous hyaline head and sternum beneath brownish, abdomen and legs ochraceous, rostium ochraceous, with its apex pitchy.

Length 4 millim.

Hab. Assam; Margherita.

OYMUS. 21

Genus CYMUS.

Cymus, Hahn, Wanz. 1, p 76 (1831), Fieb. Eur. Hem pp. 52 & 203 (1861), Stâl, Öfv Vet -Ak Forh 1872, no. 7. p 44, id En. Hem. iv, p 125 (1874)

Type, C. claviculus, Fall., a Palæarctic species

Distribution. Nearctic, Neotropical, Palæarctic, and Oriental

Regions; also found in the Pacific Islands

Body subelongate; first joint of antennæ short, not reaching apex of head; central lobe of head apically prominent; rostrum reaching or passing the intermediate coxæ, its second joint just reaching or almost reaching the anterior coxæ; claval suture longer than the scutellum.

720. Cymus tabidus, Stål, En. Hem. 1v, p 126 (1874).

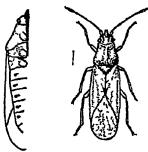


Fig 13.—Cymus tabidus

Palely ochraceous, griseous; apical angle of corium, and nearly the whole of the margin, fuscous: a pale distinct rugosity before the middle of pronotum; sulcation to head and rugosity to pronotum distinct, second joint of antennæ longer than the first and subequal in length to fourth

Length 3½ millim.

Hab. Bengal (Stockholm Mus).

I am indebted to Dr. Yngve Sjostedt for the opportunity of

figuring the typical specimen described by Stal; I have not seen another example

Subfamily III. BLISSINÆ.

We now approach the subfamilies of Lygeide in which the abdominal stigmata are not all placed on the connexivum; in the Blissine the stigmata of the sixth segment are alone ventral in position

The subfamily is a small one, but of universal distribution, or at least found in all the great faunistic regions recognised in the study of geographical distribution.

Synopsis of Genera.

A Tibus shorter than femora, tarsi very long, first joint longer than last two joints together

B Thise and femora about equally long, tarsi of ordinary size, first joint not longer than last two together

a. Intermediate coxe widely separated

Pirkimerus, p 22.

Bochrus, p 23

 Intermediate coxe moderately separated a. Posterior pronotal angles angulately produced backward CAVELERIUS, p. 23 b. Posterior pronotal angles not angulately produced backward a'. Head not spined anteriorly. a2. Anterior femora increasated and spined beneath Macropes, p 24. b². Anterior femora not incrassated and seldom spinous a. Apical margin of conum straight. Ischnodemus, p 27 b' Apical margin of corium sinuate near apex of clavus Brissus, p 28 b'. Head spined anteriorly IPHICRATES, p 27

Genus PIRKIMERUS, nov.

Type, P. sesquipedalis, Dist Distribution. Burms, Tenssserim

Tibies shorter than femora, anterior and intermediate femora moderately increased, posterior femora strongly increased and spined beneath, tarsi long, first joint of anterior and interhediate tarsi a little longer, of posterior tarsi much longer than the last two joints; body elongate, membrane not reaching abdominal apex; antenne short, robust, first and second joints a little nodulose at apices; first joint of rostrum not quite reaching base of head, which has its apex prominent and moderately produced; pronotum longer than broad, convexly narrowing anteriorly, its posterior margin concavely sinuate, corium and membrane almost equal in length, membrane with five longitudinal veins

721. Pirkimerus sesquipedalis, sp n.

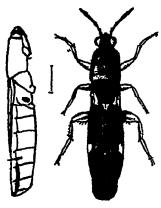


Fig 14.—Pirkimerus sesquipedalis

Piceous or very dark castaneous; antennæ and legs ochraceous; apex of antennæ infuscated, apex of clavus, a marginal spot to corium before middle, and a marginal spot to membrane creamy-white or very pale luteous; first and second joints of antennæ about subequal in length, posterior area of pronotum coarsely punctate; posterior femora strongly spined beneath, the posterior tibiæ strongly marginally setose, the tarsi marginally pilose, membrane reaching the base of the apical abdominal segment.

Length 6 to $6\frac{1}{2}$ millim Hab. Burma, Karennee (Fea).

Tenasserim; Thagata (Fea)

Genus BOCHRUS.

Bochrus, Stdl, Stett. ent Zeit xxii, p 145 (1861); id En. Hem iv. p 129 (1874).

Type, B pecilopterus, Stal, from Java.

Distribution. Oriental Region.

Body oblong, very much flattened; head small, in front of eyes triangularly produced, rostrum extending to the middle of the mesosternum, first joint shorter than the head; antennæ short, first joint merassated, slightly passing the apex of head; pronotum broad, the lateral margins rounded, posterior margin nearly straight, transversely constricted near middle; scutellum triangular; hemelytra complete but shorter than the abdomen; posterior femora strongly incrassated, compressed, rounded externally, finely spined on apical area beneath.

722. Bochrus foveatus, Dist A. M. N. H. (5) iii, p 131 (1879).

Black; apical half of clavus with a luteous discal streak; cornum

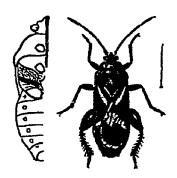


Fig 15 -Bochrus foveatus,

with a somewhat broad fascia extending from base along the whole length of inner margin, and the costal margin narrowly luteous; membrane luteous, with a very large discal fuscous spot; rostrum, coxæ, and tarsi castaneous; antennæ pilose, second, third, and fourth joints subequal in length, basal joint and apex of central lobe of head somewhat castaneous; pronotum moderately coarsely punctate, with two large discal foveæ, in front of which are three small rounded and punctured impressions, and a

large fovea on each lateral margin

Length 10; greatest width 4 millim

Hab. Assam, Garo Hills (Chennell), Margherita (Coll. Dist.). Burma; Karennee (Fea).

Genus CAVELERIUS.

Cavelerius, Dist Ann Soc Ent Belg. 1903, p. 44

Type, C. illustris, Dist.

Distribution Burma.

Allied to Macropes, differing principally by the profoundly, concavely excavated posterior margin of the pronotum in front of the scutellum, the posterior pronotal angles being produced over the bases of the corium and clavus, their apices broadly oblique and extending beyond margins of corium; basal and apical joints of antennæ distinctly thickened, apical joint longest; membrane not quite reaching apex of abdomen

723. Cavelerius illustris, Dist Ann Soc Ent. Belg. 1903, p 44

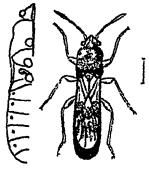


Fig 16 — Cavelerius illustris

Head, pronotum, scutellum, abdomen above, body beneath, and antennæ black, cornum dull pale luteous, apical angular areas piceous; membrane piceous, basal angle, a spot near apex of corium, and the apex, or apical margin, pale dull luteous, rostrum, legs, and basal joint of antennæ ochraceous; head and anterior lobe of pronotum shining black; body sparingly finely pilose above, much more strongly pilose beneath; rostrum just passing the anterior coxæ, its base piceous,

second joint slightly longer than third.

Length 6 millim.

Hab. Upper Burma; Taunggyi, 5000 feet (Thompson).

Genus MACROPES.

Macropes, Motsch Lt Ent. vm, p 108 (1859).

Type, M. spinimanus, Motsch

Distribution. Oriental, Ethiopian, and Australasian Regions Motschulsky relies on the following characters for the foundation of this genus, and to separate it from Ischnodenus.—Anterior femora denticulated and spined, the tibue terminated by a dentate dilatation, the apical joint of the antennæ claviform and longer than the other joints

a. Hemelytra scarcely half the length of abdomen.

724. Macropes spinimanus, Motsch Et Ent viii, p 108 (1859); id Bull Soc Nat Mosc 1863, p 82, pl ii, f 19, Dist A M N H. (7) viii, p 466 (1901)
Ischnodemus centralis, Walk Cat Het v, p 132 (1872)

Black, basal joint of antennæ and the legs reddish-ochraceous, corium very pale ochraceous, clavus piceous, its margins narrowly testaceous, apical margin of corium somewhat broadly piceous; membrane pale hyaline, with a more or less well-developed central fuscous spot. Hemelytra barely half the length of abdomen, anterior lobe of pronotum distinctly centrally sulcate, posterior lobe finely granulate, its posterior margin a little concavely sinuate in frent of scutellum.

Anterior femora finely spined beneath.

Length $5\frac{1}{2}$ to 6 millim. Hab. Ceylon (Green) b Membrane reaching the fourth, but not the fifth abdominal segment.

725. Macropes dilutus, Dut. A. M N. H (7) viii, p 467 (1901)



Fig 17.
Macropes dilutus

Head, pronotum, sternum, and femora very dark castaneous; antennæ, tibiæ, and abdomen above and beneath pale castaneous, corium pale creamy-white, base of scutellum, claval margins, apex of corium, and the membrane very dark castaneous; membrane with the inner angle, a marginal spot, and the apex creamy-white; tarsi and antennæ ochraceous.

Pronotum with a distinct, central, transverse impression, the anterior lobe with the disk somewhat flatly gibbous, its posterior margin moderately concave; apex of membrane extending beyond the fourth abdominal segment.

Length 7 millim.

Hab. "North India" (Coll. Dist.). Burma; Bhamo (Fea).

726 Macropes excavatus, Diet. A. M N H (7) viii, p 467 (1901)

Head, pronotum, scutellum, abdomen above, and body beneath black; legs and antennæ ochraceous, corium pale ochraceous, with the claval margins and venation somewhat darker; membrane piceous, basal angle, a spot on each lateral margin, and the apex creamy-white. Membrane just passing the fourth abdominal segment

Length 6 millim Hab. Assam; Shillong.

c. Membrane reaching the fifth abdominal segment

727. Macropes punctatus, Walh. (Ischnodemus) Cat. Het v, p 132 (1872), Dist A. M. N H (7) vm, p 467 (1901).

Black; tarsi castaneous or piceous, hemelytra stramineous, veins to both corium and membrane, and a large spot occupying the posterior disk of membrane, piceous, posterior margin of pronotum, rostrum, coxæ, and abdomen above and beneath castaneous. Membrane extending to the fifth abdominal segment; anterior lobe of pronotum obscurely centrally sulcate, posterior lobe with its anterior disk finely granulate, its posterior margin sinuate, its posterior angles a little lobate.

Length 10 millim.

Hab. "North India" (Boyes, Brit. Mus.).

728. Macropes præcerptus, sp n.

Black; tarsi brownish-ochraceous; apical fascia to clavus, a marginal claval fascia, a subclaval marginal fascia on corium, widened posteriorly, apical angle of corium, basal angle, a discal and marginal spot to membrane, creamy-white, membrane not passing the fifth abdominal segment; anterior lobe of pronotum centrally sulcate, posterior lobe broadly transversely punctate anteriorly, posterior margin concavely sinuate; scutellum with a fine central carination; basal area of membrane piceous, opaque, apical area more brownish-piceous; anterior femora incrassated and finely spined beneath.

Length 62 to 7 millim.

Hab. Burms; Karennee (Fea).

729. Macropes tinctus, sp n.

Black; hemelytra creamy-white; apical angle of corium and a large discal irregularly-shaped spot to membrane piceous, legs ochraceous; antennæ piceous, first joint and basal half of second joint luteous; eyes and extreme apex of head ochraceous; head and anterior pronotal lobe shining black, punctate, posterior lobe opaque black and coarsely punctate; membrane not passing the fifth abdominal segment; lateral margins of the abdomen rather longly pilose; abdomen above and beneath shortly greyishly pilose.

Length 5 milhm. Hab. Tenasserim.

730. Macropes subauratus, sp n.

Head, antennæ, pronotum, scutelium, and sternum black; basal joint of antennæ, apex of head, posterior margin of pronotum, corium, abdomen, rostrum, and legs orhraceous; membrane pale greyish-brown. Membrane reaching the base of the apical abdomestic and the second state.

segment; anterior lobe of the pronotum centrally sulcate, ch longer than posterior lobe, transverse constriction broad;

anterior femora incrassated and spined beneath.

Length 51 millim.

Hab. Burma; Karennee.

Species unknown to the writer by either specimen or figure

731. Macropes dentipes, Motsch Et Ent vui, p 108 (1859)

I have not seen this species, which Motschulsky describes as differing from M. spinimanus only by being a little smaller and narrower in shape, by the hemelytra being black posteriorly without a white margin, and by the femora and tibise being for their greater part of a darker brown.

No exact dimension is given.

Hab. Ceylon.

Genus ISCHNODEMUS.

Ischnodemus, Fieb. in West Bestr 1836, p 337, id. Eur op Hem pp 44 & 163 (1861), Stål, En Hem iv, p 129 (1874)
Micropus, Spin Ess p 218 (1840), Sign (part.) Ann Soc. Ent Fi 1857, p 24
Blissus (part.) Stål, Hem Afr. ii, p 122 (1865).

Type, I sabuleti, Fall., a Palmarctic species. Distribution Almost universally distributed.

Principally differs from *Macropes* by the unarmed and more slender femora, the anterior femora being rarely very finely spinous, the body is more slender and elongate, and the apical margin of the corium is straight.

732. Ischnodemus noctulus, Dut A M N. H (7) viii, p. 468 (1901)



Fig 18
Ischnodemus noctulus

Head, antennæ, pronotum. scutellum, membrane, and body beneath black; legs piceous, apices of femora, the intermediate and posterior tibiæ (excluding bases), and the tarsi ochraceous; corium piceous, its margins and an obscure spot at inner angle pale brownish-grey; membrane with a waved fascia near base and a subapical spot brownishgrey, antennæ with the second joint a little longer than the third, fourth long and moderately clavate: body finely and obscurely pilose above, much more distinctly so beneath.

Length 51 millim

Hab. Ceylon (Lewis & Green)

Injurious to foliage of Mysore Cardamon plant. The irritation caused by the punctures of the insects causes the leaves to roll up longitudinally, under which cover the bugs live and breed. (Green)

Genus IPHICRATES, nov.

Type, I. spinicaput, Scott, a Japanese species.

Distribution Ceylon, Japan

Allied to Ischnodemus, but differing by having the head spined on each side in front of eyes, head rather large, the lateral lobes spinously produced a little upwardly and in front of central lobe, their spices well separated, in the male there is also a long apical bifurcating process, absent in the female, in which sex the lateral lobes are less upwardly spinous.

733. Iphicrates subauratus, Dist. Ann Soc. Ent. Belg. 1903, p 44.

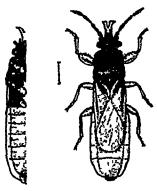


Fig. 19 Iphicrates subauratus, 3

Ochraceous; head, anterior lobe of pronotum, scutelium (excluding apex), and sternum black, anterior process to head in male, rostrum, posterior angles to prosternum, lateral margins of meso- and metasterna, luteous; antennæ piceous or very dark castaneous; anterior lobe of pronotum aparingly, posterior lobe thickly and coarsely punctate, membrane reaching the penultimate abdominal segment; anterior femora thickened and spined beneath, antennæ with the first and third and the second and fourth joints subequal in length.

Length 5 to 5½ millim

Hab. Ceylon; Pundaluoya (Green)

Genus BLISSUS.

Blussus, Klug, Symb. Phys v, pl xlui, f 10 (1845), Burm Handb. 11, 1, p 290 (1835); Stal, Ofo Vet -Al. Forh. 1872, no 7, p 45

Type, B. hirtulus, Klug, a southern Palmarctic species
Distribution Palmarctic, Nearctic, Neotropical, Ethiopian, and
Oriental Regions

Body less elongate and more oval than in the preceding genera, apical margin of the corium sinuate near the apex of the clavus

734. Blissus gibbus, Fabr (Acanthia) Ent Syst. 1v, p 75 (1794), 1d (Coreus) Syst Rhyng p 202 (1803), Stdl, Hem. Fabr. 1, p 69 (1868)

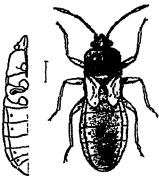


Fig 20—Blissus gibbus Immature form

Black, corium very pale ochraceous, with a large black spot at apical angles, membrane greyish-white, antenne and legs piceous, tibies and tarsi and the apices of femora ochraceous, posterior lobe of pronotum coarsely punctate Membrane in fully-developed specimens about reaching the apex of the abdomen

Length 41 millim.

Hab. Bombay; Bor Ghat (Dixon).

Cawnpore

We have here figured the immature form, because it is in that

condition a more destructive insect. In recent years the late

Mr. L. de Nicéville sent me, for identification, a number of not fully-developed specimens which were then infeating and doing much damage to sugar-canes at Cawnpore.

Subfamily IV. GEOCORINÆ.

The broad head, recurved from in front of eyes to apex, gives the species forming this subfamily a very distinctive and unmistakable appearance. The subfamily contains but few genera—Geocoius, the only one found in British India, being its dominant representative The Geocorinæ are almost universally distributed

Genus GEOCORIS

Geocoris, Fallen, Spec Hem disp p 10 (1814), Stal, Hem. Afr ii,

p 143 (1865), td Ofo Vet-Ak Finh 1872, no 7, p 46 Salda, Latr, Cit Regne Ann v p. 198 (1829), Spin Ess. p 227

Ophthalmicus, Schill (part) in Beiti zui Ent 1, p 62 (1829), Fieb Lur Hem pp 46 & 174 (1861)

Subg Procoris, Mallocoris, Stal, Oft Vet -Ak Fork 1872, no 7, pp 45, 46

Type, G. megacephalus, Rossi, a Palæarctic and Ethiopian species.

Distribution Almost universally distributed.

Body ovate, depressed, head broad, with eyes broader than anterior margin of pronotum, in front of eyes somewhat triangularly prominent, eyes large, very prominent, oblique; rostrum reaching the posterior coxe, first joint about reaching base of head; antennæ much shorter than the body, the basal joint shortest, pronotum transverse, quadrangular, a little narrowed anteriorly, scutellum large, triangular, hemelytra complete, legs moderate, femora unarmed

A Later al margins of corrum moder ately straight, not convex.

a Head luteous

Geocoris tricolor, Fab: (Cimex) Ent Syst Suppl p. 536, 176-7 (1798), id (Lygwus) Syst Rhyng p 238 (1805), Sidl, Hem Fab: 1, p 76 (1868), Dist A. M. N. H. (7) viii, p 469 (1901) Ophthalmicus ochropterus, Fieb Ent Monogi p 117, pl ix, f 26 (1844), id Wien ent Mon v, p 278 (1861) Geocoris marginicollis, Dohrn, Stett ent Zeit xxi, p 405 (1860) Ophthalmicus cinerascens, Walk Cat Het v p 138 (1872)

Head luteous, eyes castaneous; pronotum and scutellum black; lateral margins of pronotum and the corium ochraceous, the last sometimes greyish-ochraceous; membrane semilyaline, reflecting the dark abdomen beneath black;

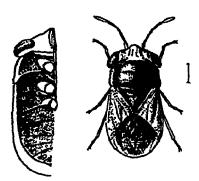


Fig 21 - Geocoris tricolor

beneath. body beneath black; head beneath, coxæ, legs, and extreme lateral margins of sternum and abdomen ochraceous; antennæ black, first joint (excluding apex) and the apical joint ochraceous; rostrum ochraceous; first joint of rostrum a little longer than the second above coarsely punctate, head and disk of corium impunctate.

Length 31 to 4 millim.

Hab Calcutta. Bangalore (Cameron). Bor Ghát (Duxon) Ceylon (Lewis) Burma, Bhamo (Fea)

736. Geocoris lituratus, Fieb. (Ophthalmicus) Ent Monogr p 116, pl 1x, f. 25 (1844), id. (Ophthalmicus) Wien ent Mon v, p. 279 (1861).

Head luteous, eyes castaneous; pronotum black, the anterior and lateral margins luteous; scutellum black; corium luteous, apical half of clavus and the apical area of corium blackish, membrane fuscous, the basal angle ochraceous body beneath and legs luteous; antennæ fuscous, the basal area of first joint luteous; rostrum luteous; first joint of rostrum longer than second. body above punctate; head, anterior area of pronotum, and disk of corium impunctate, clavus longitudinally punctate

Var. Pronotum ochraceous, with the central area blackly punctate; scutellum ochraceous, with the lateral areas blackly

punctate.

Length 4 millim.

Hab. Calcutta Ceylon (Lewis).

737. Geocoris splendidus, sp. n.

Head luteous; eyes castaneous; pronotum and scutellum black; corium dull greyish, with a large, subovate, marginal black spot on apical area, lateral margin very narrowly of the same colour; membrane pale hyaline, with the disk fuscous body beneath black; head beneath, coxæ, and legs luteous, membrane fuscous, basal joint luteous; rostrum luteous, its basal joint longer than the second coarsely punctate above, the head and disk of corium impunctate; clavus longitudinally punctate.

Length $3\frac{1}{2}$ to 4 millim Hab. Burma; Karennee (Fea).—Simmese Malay States.

738. Geocoris pulvisculatus, sp n

Luteous; the pronotum, scutellum, and corium (excluding disk) coarsely darkly punctate; eyes pale castaneous; antennæ

with the second and third joints black; rostrum luteous, first joint longer than the second; membrane pale semihyaline body beneath imperfectly seen, owing to the unique example described being in a carded condition.

Length 3½ millim.

Hab. Burma, Karennee (Fea).*

b. Head red, concolorous with body.

739. Geocoris rutilus, sp n

Body above and beneath with legs bright coral-red; apical angle and extreme lateral margin of corium black; membrane pale fuscous, the basal area blackish; antennæ mutilated in specimen described; rostrum with the first joint longer than the second: body above sparingly punctate, head and disk of corium impunctate.

Length 4½ millim.

Hab Burma; Rangoon (Coll. Dist)

c. Head more or less black.

740 Geocoris jucundus, Fieb (Ophthalmicus) Wien ent Mon v, p 270 (1861)

Head and pronotum black; a marginal spot on each side of head in front of eyes, a small central spot on the anterior and posterior margins, and the lateral angular areas of the pronotum pale ochraceous; scutellum black; corium pale ochraceous, on apical margin near inner angle a small brown spot; membrane obscure ochraceous, semihyaline body beneath black; anterior margin of prosterium and acetabula greyish-white; coxæ and legs luteous; rostrum ochraceous, bases of first and third joints and the apex black, first joint longer than second; antennæ fuscous, first joint, apex of third, and the whole of fourth joint luteous, body above coarsely punctate; disk of corium impunctate

Length 3 millim.

Hab Bengal; Ranchi (Irvine), Calcutta. Burma; Karennee (Fea)

B Lateral margins of corium distinctly convex, attenuated posteriorly

741. Geocoris ornatus, Fieb. (Ophthalmicus) Wien. ent Mon. v, p 275 (1861)

Ophthalmicus discifer, Walk. Cat Het v, p. 139 (1872)

^{*} Under the vague habitat of "Ostindien," Fieber has described and figured a species as Ophthalmicus plagnatus (Ent Monogr p. 119, pl x, f 3, 1844). I have not seen an example from British India, and therefore do not include it in the enumeration

Geocoris walkeri, Leth & Sei Cat. Gen Hem ii, p 173 (1894)

Black; head (excluding base), anterior and posterior margins of pronotum, clavus, and inner and lateral margins of corium luteous; body beneath black, head beneath, anterior margin of sternum, coxe, and legs luteous, antenne black, basal joint (excluding extreme apex) luteous, apical joint brownish ochraceous; rostrum luteous, first joint black at base and longer than second, above coarsely punctate; anterior and posterior margins of pronotum, inner margin of clavus, inner and outer margins of corium impunctate; abdomen elongately ovate

Length 3 millim.

Hab Calcutta. Ceylon (Thwaites).

Subfamily V. COLOBATHRISTINÆ.

This small subfamily differs from the other Lygæidæ in having the abdomen contracted at base and the second and third segments

very long

The subfamily Colobathristina contains only three genera, according to our present knowledge: two confined to the Oriental (Indo-Malayan) Region, the other being both Oriental and also Neotropical in distribution.

Synopsis of Genera.

A. Antennæ longer than body, apical joint short, fusiform, scutellum not longer than broad

MALCUS, p 32.

B Antennæ shorter than body, apical joint slender, not shorter than preceding joint, scutellum longer than broad...

ARTEMIDORUS, p. 33

Genus MALCUS.

Malcus, Stal, Freg Eug Resa, Ins. Hem. p 241 (1859)

Type, M flavidipes, Stal. Distribution Oriental Region.

Body oblong, stoutly formed; head transverse as seen from above, being strongly deflected in front of eyes; antennæ a little longer than the body, first joint very stout, the second a little longer than the first, third considerably longer than the second, fourth short and fusiform; rostrum reaching the intermediate coxæ; pronotum almost equally long and broad, anteriorly and posteriorly subtruncated, lateral margins a little sinuate; scutellum broadly triangular; hemelytra as long as the abdomen, membrane large with fine veins; legs slender, unarmed; abdomen with the spices of the last three segments marginally produced.

742 Malcus flavidipes, Stal, Freg Eug. Resa, Ins. Hem p. 242, pl. iii, f 2 (1859)

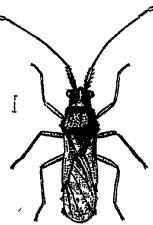


Fig. 22 -Malous flavidipes

Castaneous; apical angles of corium fuscous; membrane pale fuliginous, the veins and some irregular spots fuscous; legs stramineous: body beneath fuscous or castaneous; antennæ castaneous, the second and third joints stramineous; corium coarsely punctate, pronotum granulate

Length $3\frac{1}{2}$ to 4 millim.

Assam ; Hab. Margherita. Burma; Karennee (Fea). Tenas-serim; Myitta (Doherty).—Java

743 Malcus scutellatus, Dist A M N. H (7) viii, p 472 (1901).

Ochraceous, coarsely brownly punctate, the cerium paler and

almost impunctate on basal disk and lateral margin; scutellum brownsh, with a prominent, pale, ochraceous, levigate spot near each basal angle; membrane greyish, clouded with fuscous and with the veins fuscous; legs and antennæ very pale ochraceous, the last with the basal joint castaneous and the apical joint fuscous.

A species to be differentiated from M. flavidipes, Stal, by the prominent ochraceous angular spots to the scutellum; the pronotum is also more tumid posteriorly.

Length 3 to 4 millim.

Hab. Assam; Margherita, Shillong. Sıkhim; Kurseong. Ceylon (Lewis)

Genus ARTEMIDORUS.

Artemidorus, Dist A M. N. H. (7) xi, p. 73 (1903).

Type A. pressus, Dist.

Distribution Oriental Region.

Elongate, abdomen concavely narrowed near middle. Head broad, convexly narrowed in front of eyes, central lobe prominent and lightly produced; antenuæ with the first joint almost as long as the head and moderately incrassate at apex, second joint slightly longer than third or fourth, all longer than first; rostrum just passing the anterior coxe, first joint shorter than head, second longest, ocelli close to posterior margin, nearer to eyes than to each other; pronotum elongate, strongly laterally sinuate, transverse construction distinct, anterior lobe not prominently globose, posterior lobe deflected anteriorly, lateral angles rounded. their posterior margins slightly lobately produced; scutellium VOL II.

large, with a discal carination; corium about half the length of abdomen and concavely constricted at middle; membrane not quite reaching apex of abdomen, legs somewhat long, unarmed, posterior femora with their apices incressated; legs pilose, posterior tibiæ setose.

744. Artemidorus pressus, Diet. A. M. N H (7) xi, p 74 (1903)

Pale ochraceous; head, anterior lobe of pronotum, lateral margins of posterior lobe, base of scatellum, body beneath, and almost apical halves of posterior femora black; apex of scatellum luteous, levigate, the central carination castaneous, posterior lobe of pronotum, subapical area of scatellum, and comum darkly punctate, the outer areas of comum impunctate, their spices black;

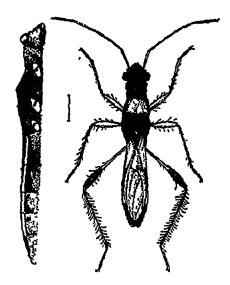


Fig 23 -Artemidorus pressus

acetabula, coxe, linear marginal spots to abdomen (above and beneath) inteous; apex of abdomen castaneous Body, antennes, and legs finely pulose, posterior tibus setose, head, pronotum, and sternum thickly punctate.

Longth 51 millim

Hab Calcutta. Ceylon (Lewis); Peradeniya (Green) Burma;

Palon (Fea).

Subfamily VI. HETEROGASTRINÆ

The basal cells to the membrane will, as shown in the synopsis of subfamilies (ante, p 2), render this subfamily easily recognisable.

Less than a dozen genera are at present included in the Heterogastrinæ, and these are distributed among all the great zoological regions, but there can be little doubt that our present knowledge of the subfamily is somewhat fragmentary.

Synopsis of Genera.

A Eyes stylated, corrum shorter than mem-

CHAULIOPS, p 35

B Eyes not stylated, cornum longer than mema Head broad, as seen from above, broader

BOCCHARIS, p. 36.

than long . b Head as long as broad or longer, much

narrowed anteriorly a Posterior margin of pronotum truncate, straight

SADOLETUS, p 37.

b. Posterior margin of pronotum concavely excavate

a'. Basal joint of rostrum extending beyond base of head; body elongately sub-

DINOMACHUS, p. 37.

b'. Basal joint of rostrum shorter than head, body narrowly elongate . . .

Hyginus, p 38.

Genus CHAULIOPS.

Chauliops, Scott, A. M. N. H. (4) xiv, p 427 (1874)

Type, C fallax, Scott.

Distribution. Ceylon, Japan.

Head broad, eyes stylated and extending beyond the anterior margin of the pronotum, a stout spine beneath each eye near base; antennæ with the first and fourth joints incressated, first joint passing apex of head which is deflected from in front of eyes, rostrum reaching the posterior coxe; pronotum large, nearly twice as broad posteriorly as anteriorly, posterior margin nearly straight in front of scutellum, the lateral angles rounded and forming a marginal callosity; scutellum large, triangular, centrally sulcate, corium about half as long as abdomen, its lateral margin sinuate, its apex lobately rounded; membrane very large, with five veins; sternum with a rostral channel; femora moderately incrassated, with a short spine beneath a little beyond middle.

The position of this very peculiar genus is rather difficult to decide Its founder, Scott, described it as reminding one "of a minute species of Nysius with the eyes of Henestaris, between which genera it apparently stands." Uhler has since located it in the Heterogastrine, and I have followed him in that decision.

745. Chauliops fallax, Scott, A. M. N. H. (4) xiv, p. 428 (1874); Uhler, Proc US N H Mus xix, p 264 (1896).

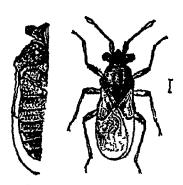


Fig 24 -Chaultops fallux.

Pale brownish or brownish luteous, pronotum somewhat flickly and deeply punctured; scutellum black, with a short white streak at the basal angles: corium pale brownish, greyish at the base, and with a small black discal spot, posterior margin broadly castaneous, tennæ pale luteous, first joint and apex of the fourth castaneous; rostrum ochraceons, its apexi black; pronotum with a pale central longitudinal line, and with a castaneous transverse fascia near anterior margin, femora castaneous, their bases

luteous, tibue and tarsi luteous, bases of the tibue dark castaneous. Length 2½ to 3 millim.

Hab. Ceylon; Peradeniya (Green) - Japan (Lewis).

In all stages this species punctures the foliage of a small bean (Dolichos unguiculata) and completely checks the growth of the plant. (E E. Green.)

Genus BOCCHARIS, nov

Type, B. significatus, Dist.

Distribution Burma.

Head broad, as seen from above much broader than long, eyes prominent; rostrum long, reaching the posterior coxe; first joint almost extending to base of head, basal joint of antenne not



Fig 25 -Boccharis ergnificatus

quite reaching apex of head, second and fourth joints subequal, third shorter, pronotum subquadrate, a little nodulose at lateral angles, anterior angles detached from but nearly parallel with outer margins of eyes, obscurely transversely constricted, posterior lobe very distinctly centrally sulcate; scutelluip centrally carmate; corium much longer than membrane, which reaches the abdominal apex; femora only moderately incrassated.

746. Boccharis significatus, sp. n

Head, anterior lobe of pronotum, and scutellum black, posterior pronotal lobe, apex of scutellum, and corium ochraceous,

, the first darkly punctate, the punctures forming two central spots, the corrum longitudinally punctate; membrane pale hyaline; connexivum ochraceous spotted with piceous body beneath piceous, grevishly pilose; legs ochraceous, posterior femora with two dark spots a little before apices, antennæ ochraceous, the third and fourth joints a little infuscated.

Length 5 millim.

Hab Burma . Bhamo (Fea).

Genus SADOLETUS, nov.

Type, S validus, Dist

Distribution Oriental Region

Body robust, subelongate; head short, triangular, eyes touching the anterior margin of the pronotum; antennæ with the basal joint just passing the apex of the head, fourth joint slightly longest; ocelli placed a little before eyes and near posterior margin; iostrum about reaching the posterior coxæ, first joint as long as head, pronotum transversely constricted, moderately widened posteriorly, posterior margin straight; scutellum large, subtriangular, moderately tumid at base, corium extending to about two-thirds the length of the abdomen, membrane passing the abdominal apex

747 Sadoletus validus, sp n

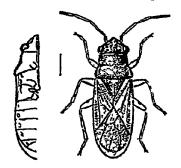


Fig 26 - Sadoletus validus

Olivaceous, posterior lobe of pronotum, apex of scutellum, and abdomen brownish - olivaceous; legs and antennæ stramineous, third and fourth antennal joints somewhat infuscated, tibiæ biannulated with p'le brownish, and apices of tarsi the same colour; posterior femora with a fuscous spot on upper surface a httle beyond middle; head, anterior lobe of pronotum, base of scutellum, and sternum thickly and finely pilose; posterior lobe of

pronotum and apex of scutellum thickly punctate, corium linearly and more sparingly punctate; membrane pale hyaline.

Length 12 millim.

Hab Ceylon, Peradeniya (Green). Mergui.

Genus DINOMACHUS.

Dinomachus, Dist. A M. N H (7) viii, p 473 (1901).

Type, D. marshalli, Dist, an African species Distribution. Ethiopian and Oriental Regions.

Body elongate, subovate, head broad, robust, pointed anteriorly; first joint of antennæ reaching or passing apex of head; basal joint of rostrum extending beyond base of head; pronotum distinctly centrally transversely impressed, anterior lobe a little globose,

posterior lobe widened to lateral angles, posterior margin concavely sinuate; scutellum large, subtriangular; corium longer than membrane: femora not prominently incrassated.

Allied to the Palmarctic genus Heterogaster, from which it differs by having the central lobe of the head longer than, and projecting beyond, the lateral lobes, the head and body are also more elongate

748. Dinomachus sikhimensis, sp n

Ochraceous, thickly blackly and coarsely punctate; much suffused with black, especially on head, pronotum, scutellum, and the apical area of the corium, where there is an irregular transverse fascia followed by a rounded spot, membrane pale



Fig 27 - Dinomachus silhimensis.

bronzy: body beneath greyishly pilose; legs ochraceous; apices of femora and annulations to tibiæ black; connexivum black, spotted with ochraceous; antennæ ochraceous, pilose

Length 8½ millim.

Hab Sikhim.

Genus HYGINUS.

Hygnus, Stäl, Freg Eug Resa. Ins. Hem. p 241 (1859), id En Hem iv, p 168 (1874)

Type, H. kinbergi, Stal, from the Philippines

Distribution. Oriental Region.

Elongate, head broad, narrowed in front of eyes, central lobe prominent, occili situate near base and nearer to eyes than to each other; eyes prominent; antennæ slender, finely pilose, second joint longest; rostrum reaching the intermediate coxæ, first joint shorter than the head, pronotum long, posterior margin strongly concave, lateral margins sinuate, posterior lobe widened at lateral angles and depressed anteriorly, transverse constriction distinct, anterior lobe moderately gibbous, scutellum large, disk with a cruciform carination, corium two-thirds the length of abdomen, lateral margins almost straight; membrane reaching apex of abdomen, which is a little narrower at apex than at base; legs pilose, unarmed.

749. Hyginus signifer, Walk. (Heterogaster) Cat Het v, p 74 (1872) Dut. A M. N. H (7) viii, p 472 (1901).

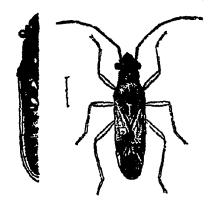


Fig 28 - Hyginus signifer.

Head, anterior lobe of pronotum, base of scutellum, and sternum black; abdomen beneath piceous; posterior pronotal lobe, scutellum, and corium brownish-ochraceous; membrane subhyalme, piceous on apical area, legs, rostrum, and antennæ stramineous; second, third, and fourth joints of antennæ piceous with their bases stramineous; head, pronotum, scutellum, and sternum thickly and coarsely punctate; central carination to scutellum stramineous, levigate; corium

sparingly punctate, its extreme lateral margins luteous; body finely pulose, legs strongly pulose.

Length 7 millim.

Hab. Ceylon; Tangalla (Green).

Subfamily VII. PACHYGRONTHINÆ.

In the Pachygronthine the anterior femora are much increasated and spined beneath, the rostrum short and not extending beyond, or only slightly beyond, the anterior coxe.

A small subfamily, comprising fewer than a dozen genera, and very widely distributed. Only two are at present known from

British India.

Synopsis of Genera.

A First joint of antennæ very short, not reaching apex of head; scutellum nearly equilateral

B. First joint of antennes very long, longer than any of the other joints, scutellum a little longer than broad Phlegyas, p. 39.

PACHYGRONTHA, p. 40.

Genus PHLEGYAS.

Phlegyas, Stål, Hem. Afr. ii, p 145 (1865); id. En. Hem. iv, p. 138 (1874).

Helenotus, Uhler, Bull. U.S Geol. Geog Surv. v, p. 312 (1876). Peliopelta, Uhler, Check-List Hem Het. N Am. p 15 (1886). Helonotocoris, Leth Ann Mus. Civ Gen. 1888, p 463.

Type, P. annulicrus, Stål, a North-American species Distribution. Nearctic, Neotropical, and Oriental Regions.

Body elongate, first joint of antennæ very short, not reaching apex of head, eyes prominent; first joint of rostrum not reaching base of head; pronotum convex; scutellum subequilateral; apical margin of corium sinuate near apex of clavus, anterior femora moderately incrassated.

750. Phlegyas burmanus, sp n



Fig 29 Phlegyas burmanus

Head, pronotum, and scutellum black, finely pilose, antennæ, eyes, and two obscure discal spots to pronotum dull, dark ochraceous; basal joint of antennæ piceous; apical margin and apex of scutellum and the corium ochraceous, membrane obscure hyaline: body beneath piceous; lateral areas of sternum and lateral margins of abdomen obscure ochraceous; femora mostly black, their upper surfaces and apices, the tibue and tarsi ochraceous, bases and apices of tibue black, third and fourth joints of antennæ longest and subequal in length; pronotum somewhat coarsely granulate, with a dis-

tinct central longitudinal carmation.

Length 4 millim. Hab. Burma; Pegu.

Genus PACHYGRONTHA

Pachygrontha, Germ in Silb. Rev Ent v, p. 152 (1837), Still, Hem Afr 11, pp 146 & 147 (1865), id En Hem 1v, p 138 (1874)
Pachygroncha, Spin Gen d'Ins Atr p 140 (1852)
Atractophora, Still, Ofv Vet-Ak Foih 1853, p 250
Peliosoma, Uhler, Proc Ac Philad 1860, p 229
Dilophos, Monti. Ann Soc Linn Lyon, x1, 1864, p 226

Type, P lineata, Germ, a South-African species

Distribution Ethiopian, Eastern Palearctic, Oriental, and Neotropical Regions

Basal joint of antennæ longest, very considerably passing the apex of the head, its apex distinctly increased, scutellum longer than broad, apical margin of corium straight.

a First joint of antennæ about as long as head and pronotum together.

751. Pachygrontha lewist, Dist A M N H (7) vii, p. 474 (1901)

Ochraceous; body above, sternum, and legs coarsely punctate; pronotum with a central pale levigate fascia, bordered on each side with piceous, a spot of the same colour in each anterior lateral

area, and one at each posterior angle; scutellum with the base black and a central, basal, lunate, levigate, pale fascia, continued in a straight line to apex, which is similarly levigate; inner claval margin and apex of clavus piceous; corium with the punctures arranged in longitudinal series, its apex and a somewhat large spot at inner angle piceous; membrane with two converging piceous fascize from base to apex; abdomen beneath pale, impunctate;

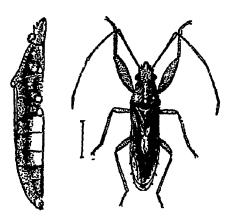


Fig 30.—Pachyqrontha lewisi

a lateral fascia on each side from head to apex of abdomen, a narrow central macular fascia to abdomen, and margins of the anal appendage black.

Antenna with the second and third joints subequal in length, the first longest, fourth shortest. Eyes projecting a little beyond

anterior margin of pronotum

Length 8 millim.

Hab. Ceylon (Lewis & Green).

Beaten from tufts of Cyperus sp. (Green).

752. Pachygrontha nigrovittata, Stål, Ofv. Vet-Al. Porl. 1870, p 662

Ochraceous, above with head beneath and sternum thickly darkly punctate, the punctures at the lateral margins of the pronotum more dense, and giving a dark fasciate-like appearance, apical margin of the corium with three small dark spots, one at inner angle, one medial, and the other at apical angle; disks of meso- and metasterna, a sublateral fascia, and apical discal fascia to abdomen black; legs punctured with black; basal joint of antennæ about as long as head and pronotum together; a central levigate line to pronotum and scutellum.

Length 10 to 10½ millim.

Hab Assam. Sibságar (Peal)., Ceylon (Lews); Peradeniya (Green). Tenasserim (Coll. Dist) — hilippines

b. First joint of antenna about as long as head, pronotum, scutellum, and claval suture together.

753. Pachygrontha dixoni, sp n.

Pale ochraceous, thickly punctate, the punctures a little darker, in some specimens the apical angle of the corium roseate; head . beneath, sternum, sublateral margins, and apex of abdomen fuscous; basal joint of autennæ about as long as head, pronotum, scutellum, and claval suture together, pronotum with a central levigate line, scutellum with a central levigate line, on each side of which at base is an oblique spot or callosity, head with eyes a little broader than pronotum.

Length 7 millim.

Hab. Bombay; Bor Ghát (Dixon). Ceylon (Lewis).

Allied to P. tabida, Stal, but differing by the presence of the anterior callous spots to scutellum, different colour of abdomen beneath, &c

c. First joint of antennæ reaching apical angle of corum

754. Pachygrontha longicornis, Stall (Atractophora), Ann Soc. Ent Fr. 1865, p 188

Ochraceous; above with head beneath and sternum darkly punctate; pronotum with three central carine, the central most distinct; scutellum with a central carina, which is bifurcate to the basal angles; abdomen with a faint basal, submarginal black fascia; legs darkly punctate; antennæ very long, hasal joint reaching or almost reaching apical angle of corium; head, including eyes, a little broader than anterior margin of pronotum.

Length 13 millim.

Hub. Burms; near Rangoon (Coll Diet.) -Originally described from the Island of Mysol

Subfamily VIII. OXYCARENINÆ

The Ozycareninæ differ from the Pachygronthinæ in having the anterior femora not incrassated, and by the rostrum extending

considerably beyond the anterior coxe

This subfamily contains at present some fourteen genera, of which only one is recorded from British India The majority are purely Palearctic in distribution, Oxycarenus being the dominant and most widely distributed genus, while one is only found in the Nearctic and Neotropical Regions

Genus OXYCARENUS.

Oxycarenus, Fieb West Beitr 1836, p. 339, id Eur Hem pp 53 & 205 (1861), Stål, Öfv Vet-Ak Forh 1872, no 7, p. 50; id En Hem iv, p 141 (1874)

Stenogaster, Hahn, Wanz. in, p 15 (1835), Herr.-Sch Wanz 1x, p 213 (1853)

Type, O. lavatera, Fabr., a Palæarctic species

Distribution Palcarctic, Ethiopian, Oriental, and Australasian

Regions

Body oblong or a little elongate; head triangular, porrect, produced anteriorly in front of the antenniferous tubercles; rostrum long and slender; pronotum trapezoidal, constricted medially, scutellum triangular, a little broader than long; hemelytra complete, broader and longer than the abdomen, the lateral margins straight and dilated, legs with the femora moderately incrassated and very finely spined beneath

755. Oxycarenus lætus, Kurby, J Lum Soc, Zool xxix, p 102 (1891)

Head, antennæ, pronotum, scutellum, body beneath, and legs

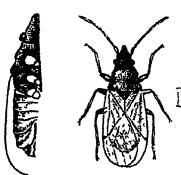


Fig 31 -Oaycarenus lætus.

piceous; corium very pale stramineous, with a small piceous spot at apical angle, membrane pale greyish hyaline; intermediate and posterior tibiæ pale stramineous, their bases and apices piceous; tarsi stramineous, their apices piceous, acetabila and posterior margin of metasternum stramineous; anterior femora distinctly spined beneath.

Length 4 millim.

Hab Calcutta Bombay (Dixon). Ceylon (Gieen). Burma; Mandalay (Fea)

Frequents the seed-capsules of Abutilon assaucum in Ceylon (Green). Collected on the capsules of the cotton-plant Gossypium stocksu at Bombay (Divon)

756 Oxycarenus proximus, Walk (Anthocoms) Cat Het v, p. 152 (1872), Dist. A M. N. H (7) viii, p 475 (1901)

Head, anterior lobe of pronotum, and scutellum black; posterior pronotal lobe and clavus piceous or castaneous, corium piceous, with about basal third white. membrane pale bronzy-brown, the basal margin and inner angle somewhat broadly white body

beneath black; posterior margin of metasternum white; antennæ black; legs piceous, posterior tiblæ with a broad white annulation; posterior lobe of pronotum granulate; rostrum reaching the posterior coxæ.

Length 5 unllim.

Hab. "Hindostan" (Parry, Brit Mus).

Walker describes the exterior margin of the cornum as white; it is, however, the basal margin of the membrane which is of that colour.

757. Oxycarenus heraldus, sp. n

Head, antennæ, and rostrum piceous; pronotum castaneous, with a submarginal auterior black fascia, scutellum piceous; corium very pale strainineous, clavus and a large spot near inner angle castaneous, membrane, body beneath, and legs piceous or very dark castaneous; posterior inargin of inetasternum and tabiæ pale stramineous, intermediate and posterior tibiæ with their bases and apices piceous

Length 3 to 32 millim.

Hab. Burma, Karennee (Fea)

758. Oxycarenus bicolor, Fieb Rhynchotogr p. 39 (1851)

Head, antennæ, pronotum, scutellum, body beneath, and femora piceous, corium piceous, the clavus brownish, basal and apical angular areas white, the last with a small piceous spot near apical angle, membrane dark fuliginous, its apical margin whitish, anterior tibus brownish, intermediate and posterior tibus and all the tarsi pale luteous, the first with their bases and apices and the last with their apices piceous; spots to metasternum (imperfectly seen in carded specimens) luteous; head, pronotum, and scutellum greyishly pilose, anterior femora distinctly spined beneath

Length 3 millim

Hab Burma, Bhamo (Fea).

759 Oxycarenus lugubris, Motsch (Stenogaster) Ét Ent viii, p 108 (1859), Dist A M N H (7) viii, p 475 (1901)
Rhopalus? funeralis, Kii by, J Linn. Soc., Zool xxiv, p 97, pl. iv f 7 (1891).

Piceous; membrane black, its apical margin fuliginous; lateral margin of corium, a somewhat large subbaral spot, intermediate and posterior tibiæ, and posterior margin of metasternum pale strammeous or greyish; bases and apices of intermediate and posterior tibiæ piceous; body above greyishly pilose, anterior temora distinctly spined beneath.

Length 4 millim.

Hab. Ceylon (Green & Lewis)
In Ceylon this insect infests the ripe pod of the cotton, discolouring and caking the cotton (Green)

Subfamily IX APHANINÆ.

The distinguishing character of this, the largest subfamily of the Lygende, is to be found in the character of the third ventral incisure, which does not reach the abdominal lateral margins, near which it is recurved.

The Aphanine comprise a large number of genera, which fall into fairly well-marked divisions. They are distributed in all parts of the world, and many more remain to be discovered when the smaller insects are more thoroughly searched for in the tropics.

Division CLERADARIA.

Cleradaria, Stal, En. Hem iv, p. 143 (1874)

First and second joints of the rostrum taken together about equal in length to the head, third joint much the shortest; ocelli situate wide apart

Synopsis of Genera

A. Head longer than pronotum and not nearly immersed to eyes, first joint of antenna passing apex of head

CLERADA, p. 45

B Head not so long as pronotum, nearly immersed to eyes; first joint of antennæ only reaching apex of head

EDULICA, p 46

Genus CLERADA

Clerada, Sign in Maillaid, Notes sur l'Ile de la Réunion, Ins. p. 28 (1862), Stâl, Hem Afi ii, pp. 152 & 155 (1865), id En Hem iv, p. 143 (1874)

Type, C aproicornis, Sign.

Distribution. Widely distributed; already recorded from the Oriental, Neotropical, and Australasian Regions; also found in the Mascarene Islands.

Body narrowly ovate, depressed; head porrect, a little longer than the pronotum, not nearly immersed to the eyes; rostrum extending to the intermediate coxe, first and second joints together equal in length to head; antennæ with the first joint shorter than the head, but passing its apex; pronotum transverse, trapezoidal, narrowed anteriorly, its lateral margins acute, reflexed, medially sinuate; scutellum triangular, corium much longer than the membrane, its costal margin moderately convex; femora unarmed.

760. Clerada apicicornis, Sign in Maillard, Notes sur l'Ile de la Réunion, Ins p 28, pl xx, f 8 (1862), Stéll, Hem Afi. ii, p 155 (1865), Dist A M N. H. (7) vin, p 476 (1901) Gastrodes terminalis, Walk Cat Het v, p 122 (1872).

Dark brownish-ochraceous; margins of the pronotum, lateral

margins of the corium (widest near base), and disk of abdomen

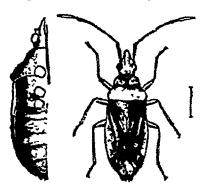


Fig. 32 — Clerada apreicornis

beneath luteous; antennæ fuscous, base of second joint ochraceous, apical joint pale luteous; rostrum and legs pale luteous; head centrally granulate between eyes; pronotum, scutellum, and corrum thickly and finely punctate.

Length 6 to 7 millim Hab. Bengal (Stockholm Mus.). Ceylon (Green) ---Samoa (Coll. Dist) Isld. Réunion. Mexico Venezuela. West Indies.

Genus EDULICA.

Edulica, Dist. Ann. Soc Ent Belg 1903, p 45

Type, E ornata, Dist Distribution. Ceylon.

Body suborate, elongate; head narrowed and acuminate in front of eyes, which are large and placed somewhat near base, ocelli situate near lateral margins immediately behind eyes, rostrum reaching posterior coxe, first joint almost reaching base of head; antenne robust, first joint shortest, reaching apex of head, about half the length of second, third very slightly shorter than fourth; pronotum transverse, broader than long, anterior margin moderately concave, lateral margins nearly straight, very slightly rounded, posterior margin straight; scutellum subtriangular, a little tumid on lateral areas; corium covering two-thirds of abdomen, apical margin nearly straight, lateral margins a little ampliated; membrane reaching abdominal apex; femora moderately incressated

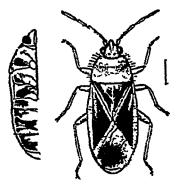


Fig. 33 -Edulica ornata

761. Edulica ornata, Dist Ann. Soc Ent. Belg 1903, p 45

Ochraceous; eyes black, central area of pronotum strongly punctate and fuscous; apical margins of scutellum, clavus, corrum (excepting base and lateral margins), spots near the anterior and posterior coxe, marginal abdominal spots, and transverse suffusions to the last three abdominal segments piceous; membrane with fuscous suffusions on apical area; scutellum, clavus, and corium distinctly

punctate; lateral margins of corium somewhat strongly pilose

Length 5 milhm. Hab. Ceylon, Peradeniya (Green)

Division MYODOCHARIA.

Myodocharia, Stal, En Hem 1v, p 142 (1874)

Pronotum with a distinct collar, and near middle prominently constricted, the lateral margins at the area of the constriction distinctly angulated; the lateral margins of the anterior lobe obtuse, convex, neither dilated, callous, nor carnate; first and second joints of the rostrum passing base of head, third joint not shortest, generally equal in length to second joint.

Synopsis of Genera.

A Head about as long as pronotum. a Head strongly constricted and slender behind eyes b Head scarcely constricted behind eyes B Head about as long as anterior lobe of	VERTOMANNUS, p. 47 ALTOMARUS, p. 48.
pronotum a. Apex of scutellum produced in a robust conical spine b. Apex of scutellum unarmed anterior lobe of pronotum not twice as long as posterior	Udaliceus, p 49 😞
lobe a' Pronotal collar broad, body prominently elongate b' Pronotal collar narrow, body sub- elongate C Head shorter than anterior lobe of pronotum anterior lobe of pronotum twice as long as posterior lobe; anterior tibiæ, at least in male sex, more or less spinous	Paromius, p. 50 Pamera, p 51
 a² Eyes not stylated, anterior pronotal lobe moderately globose b² Eyes stylated, anterior pronotal lobe gibbously globose 	EUCOSMETUS, p 55 CARIDOPS, p. 56

Genus VERTOMANNUS.

Vertomannus, Dist Ann Soc Ent Belg. 1903, p 45

Type, V capitaius, Dist Distribution. Oriental Region.

Head longer than the pronotum, strongly exserted on a cylindrical process about as long as the apical half, which is thickened, subglobose, somewhat coincally produced at apex; antennæ with the first joint moderately thickened considerably passing apex of head, second, third, and fourth joints slender, pilose, almost subequal in length; rostrum about reaching the anterior coxæ, first joint thickened and reaching the area of the eyes; pronotum with the anterior lobe only about half the length

of the posterior lobe; scutellum trungular; body elongate; lateral margins of the corium slightly concavely sinuate, membrane passing the apex of the abdomen; legs slender, femora a little apically incressated.

Allied to the American genus Myodocha, from which it can be

at once separated by the structure of the pronotum.

762. Vertomannus capitatus, Dust Ann. Soc Ent. Belg 1903, p. 46

Head, sternum, anterior lobe of pronotum, and scutellum black; posterior pronotal lobe, corium, and body beneath pale castaneous,



Fig 34 - Vertomannus capitatus.

apex of scutellum pale luteous; corrum much suffused with whitish coloration, principally a spot about one-third from base of lateral margin, a subapical spot, angulate anteriorly, and a small rounded spot near inner angle, membrane fuscous, with a large marginal spot and apex pale subhyaline, legs luteous, apical halves of femora reddish-ochraceous, apices of tibiæ and tarsal joints fuscous; ochraceous, antennæ joint (excluding base) piceous; posterior pronotal lobe and corrum sparingly but coarsely punctate, the pale spots to corium levigate; posterior lobe

of pronotum centrally carinate on its anterior area, legs finely birsute; rostrum luteous, basal joint castaneous.

Length 6 to 64 millim.

Burma. Hab. Assam; Margherita

Genus ALTOMARUS

Altomarus, Dist. A M. N. H. (7) x1, p 72 (1903).

Type, A. greeni, Dist.

Distribution. Cevlon, Burma.

Elongate; head long, about as long as pronotum, anteocular portion about as long as postocular portion, angularly produced in front of eyes; first joint of antennæ about reaching the apex of head; rostrum long, about reaching the intermediate coxe, first joint much shorter than head, just passing the region of the eyes, pronotum with a very distinct anterior collar, anterior lobe slightly longer but much narrower than posterior lobe, subglobose, its

margins convex, posterior lobe slightly gibbous, the lateral angles rounded and subprominent; scutellium elongately triangular; corium moderately widened towards apex, its apical margins straight; membrane passing the abdominal apex; anterior femora incrassated, armed beneath with a series of long spines; anterior tibiæ a little shorter than the femora and slightly curved; intermediate and posterior legs slender.

763. Altomarus greeni, Dut A M N. H (7) xi, p. 73 (1903)

Head, pronotum, scutellum and sternum shining black,

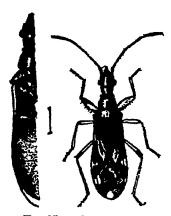


Fig. 35 —Altomarus greem

abdomen shining piceous, corium pale castaneous, antennæ, anterior pronotal collar, apex of scutelium, basal half of lateral margin, a spot before apex, one at inner angle, and venation of corrum and the legs pale ochraceous; first joint of antennæ and apical half of fourth joint and subapical annulation to femora very coarsely piceous; head punctate, anterior pronotal lobe impunctate, posterior lobe and scutellum finely punctate; corium linearly punctate; membrane pale brownish, with three distinct pale apical spots; antennæ with the first joint shortest, second longest,

fourth a little longer than third.

Length 5 millim.

Hab. Ceylon; Gampola (Green) Burma; Bhamo (Feh).

Genus UDALRICUS, nov.

Type, U. scutellatus, Dist. Distribution. Burma.

Body elongate; head long, about as long as anterior lobe of pronotum; first joint of antennæ robust, considerably passing apex of head, second longest, first, third and fourth joints subequal; basal joint of rostrum about reaching the area of the eyes; pronotum deeply transversely impressed, anterior lobe globose, much longer than posterior lobe which has the lateral angles subprominent; scutellum with the apex produced into a robust conical spine, slightly directed upward; abdominal magins a little upwardly dilated, extending beyond the margins of the corium; anterior femora incrassated, finely spined beneath; abdominal apex truncate.

764. Udalricus scutellatus, sp. n

Black, opaque; second, third and fourth joints of antenne, bases of intermediate and posterior femora, tibie, tarsi and lateral margins of mesosternum ochraceous, nearly basal half of corium and a marginal spot between it and apex luteous; membrane with a large white spot on each side; head, pronotum

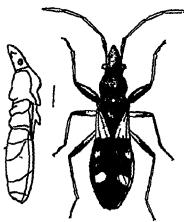


Fig 36 - Udalricus scutellatus,

and scutellum very finely and obscurely granulate, connexivum greyishly pubescent; anterior femora with a distinct spine beneath a little beyond middle.

Length 5 millim

Hab. Burms; Karennee (Fea).

Genus PAROMIUS.

Paromius, Fieber, Eur. Hem pp 45 & 170 (1881), Stâl, Ofv Vet-Ak. Forh 1872, no 7, p 51 Stendooris, Ramb. Faun Ent. Andal p. 139 (1838)

Type, P leptopoides, Baerenspr, a Palmarctic species
Distribution. Palmarctic, Ethiopian, Nearctic, and Neotropical

Regions

Body elongate, slender; pronotal collar broad, head about as long as anterior lobe of pronotum; antenna moderately long, first joint passing the apex of the head, rostrum reaching anterior coxes, first joint not reaching base of head; scutellum long, subtriangular, centrally carinate on apical area; corium longer than membrane, apical margin straight; anterior femora incrassated, apined beneath.

765. Paromius seychellesus, Walk (Plociomerus) Cat Het v, p. 120 (1872), Dut A. M. N. H. (7) viii, p. 477 (1901)
Pamera ejuncida, Dut Tr E S 1883, p. 433, pl. xx, f S

Head and anterior lobe of pronotum black, the collar of the last

brownish; posterior pronotal lobe ochraceous, sparsely bu'deeply

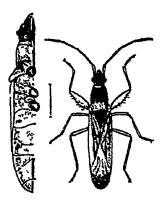


Fig 37 -Paromius seychellesus

punctate, brownish anteriorly, with a central piceous line which does not reach posterior margin; scutellum castaneous, with either the basal half black and a central black line, or with a large central basal spot, the basal half of lateral margins and a central line black, apex luteous; corium pale ochraceous, sparingly punctured with brown, the lateral margins pute and impunctate, a black spot near centre of apical margin, attached to which are some linear black punctures more or less enclosing a subtriangular pale spot at claval apex; clavus thickly and longitudinally brown-

punctured, membrane greyish-white, head beneath and sternum piceous, abdomen castaneous with a few transverse stigmatal piceous spots, antennæ and legs ochraceous, apices of tarsi black, coxe castaneous, apex of rostrum piceous.

Length 71 millim.

Hab Ceylon, Peradeniya (Green) Burma, Bhamo (Fea) — Japan (Lewis). Seychelle Islands (Brit Mus.).

766. Paromius exiguus, Dist (Pamera) Tr E. S 1883, p 434

Allied to the preceding species (P. seychellesus, Walk.), but differing by the shorter and less elongate anterior lobe of the pronotum; the apical joint of the antennæ distinctly infuscated. the whole of the body beneath uniformly piceous; all the femora (excluding apices) more or less piceous, membrane pale fuscous, with the veins greyish

Length 7 millim.

Hab Ceylon, Tangalla (Green) — Japan (Lewis)

Genus PAMERA

Pamera, Say (part), New Harm Ind (1831), id Compl Writ. 1, p 332 (1859), Still, En Hem 1v, p 144 (1874)

Plociomerus, Amy & Serv Hem p 255 (1843), Fieb Europ. Hem.

pp 45 & 171 (1861)

Subg Diplonotus, Stål, Ofv Vet-Al Förl 1872, no 7, p. 51 Subg. Orthea, Dall List Hem 11, pp 532 & 580 (1852)

Subg Gyndes, Stal, Stett. ent Zeit xxiii, p 314 note (1862)

Type, P. vincta, Say.

Distribution. Somewhat universally distributed

Alhed to Paromsus, but much less elongate and more robust in form; pronotal collar narrow; head as long as anterior pronotal lobe or a little longer

- A. Anterior femora excluding apices wholly black or dark castaneous.
- a. Intermediate and posterior femora more or less black or castaneous.

767. Pamera pallicornis, Dall. (Rhyparochromus) Last Hem is, p. 573 (1852); Horv. Termész. Füzetek, 111, p. 147 (1879); Dist A. M. N. H. (7) viii, p. 479 (1901)
Plociomerus discoguitatus, Dohrn, Stett. ent Zeit xxi, p. 404 (1860).
Rhyparochromus delineatus, Walk. Cat Het. v, p. 103 (1872).

Head and anterior lobe of pronotum black; posterior pronotal lobe castaneous with four small luteous spots (two central and one

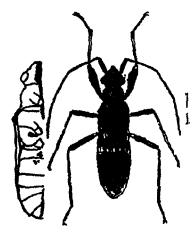


Fig 38 —Pamera pallicorms

near each lateral angle), or in some specimens black with the spots obsolete as in the specimen here figured; scutellum black, corium pale luteous, brownly punctate; lateral margin impunctate, a very small subbasal spot, an irregular transverse spot crossing disk from inner angle and an apical angular spot dark castaneous; membrane fuliginous, with basal area and small apreal marginal spots dark castaneous body beneath piceous; posterior angles metasternum. legs, antennæ luteous; extreme apex of third joint of antennæ, extreme base and apical half of

fourth joint, anterior femora (excluding apices), apical halves of intermediate and posterior femora and apices of the tarsi fuscous or piceous, rostrum piceous

Length 6 millim.

Hab. Shillong, Margherita (Ind. Mus). Kurseong. Ceylon
(Lewis & Green). Burma, Rangoon, Palon, Bhamo, Karennee,
Teinzo (Fea). Tenasserim; Kawkaret (Fea).—Philippines; Japan.

768. Pamera vincta, Say, New Harm. Ind (1831), ad Compl Writ 1, p 353 (1859); Dist A. M. N. H. (7) vm, p 480 (1901)
Lygens (Plocnomerus) amyotni, Guer, m Sagra, Hist de Cuba, Ins. p. 400 (1867)

Rhyparochromus gutta, Dall Isst Hem. 11, p 573 (1852) Rhyparochromus parvulus, Dall op est. p. 576 (1852). Rhyparochromus vinulus, Stall, Frey Eug Ress, Ins. Hem p 246

Plociomera parvula, var a, Stål, Hem Afr. u, p 159 (1885) Plociomera parvula, var a, Stål, Hem Afr. u, p 159 (1885). Ligyrocoris bipunctatus, Kirby, J. Linn Soc, Zool xx, p 547 (1890).

Head, pronotum, scutellum and body beneath black; basal marginal area of posterior pronotal lobe usually more or less castaneous, antennæ, corium and legs luteous; apical joint of

antennæ, apical margin of corium, anterior femora (excluding apices), and subapical annulations to intermediate and posterior femora fuscous, castaneous, or black; membrane greyish, veins at base generally somewhat castaneous; corium brownly punctate, lateral margins impunctate, a pale impunctate spot near apex of claval suture; rostrum dark castaneous.

Length 3 to 4 millim.

Hab. Bengal, Runchi (Irvine), Calcutta. Ceylon (Green & Lewis) Burma; Rangoon, Palon, Bhamo (Fea).—This species is apparently distributed throughout the tropical and subtropical regions, it was found by Dr. Andrews at Christmas Island, is recorded from the island of Tahiti, occurs in South Africa, is common throughout the Neotropical Region, and was described by Say from North-American specimens.

769. Pamera metneri, Dohin (Plociomerus), Stett. ent Zeit xxi, p 404 (1860), Stäl, En Hem iv, p 151 (1874).

Head, anterior lobe of pronotum, and scutellum black, posterior pronotal lobe and corium very dark castaneous; lateral margin of coilum luteous, impunctate, two small spots a little before apical angle greyish-white; membrane dark fuliginous: body beneath and legs black; apex of scutellum, apices of anterior femora, anterior tabiæ (excluding apices), basal halves of intermediate and posterior femora, intermediate and posterior tabiæ (excluding bases and apices) and bases of tarsi luteous, antennæ piceous, second joint castaneous; rostrum piceous, second joint luteous.

Length $6\frac{1}{2}$ to 7 millim.

Hab. Ceylon; Peradeniya, Tangalla (Green). Burma; Bhamo (Fea)

b. Intermediate and posterior femora ochraceous.

770 Pamera undulata, Dohrn (Plociomerus), Stett. ent Zeit xxiv p 404 (1860)

Head, pronotum and scutellum black; margins of pronotal lateral angles, apex of scutellum, corium and legs ochraceous: body beneath and anterior femora (excluding apices) black; corium brownly punctate, the lateral margins impunctate; an enclosed pale levigate spot margined with brown near apex of claval suture, the apical margin brownly fuscous; membrane pale semihyaline, with some pale fuscous marginal spots; antennæ dark ochraceous, the apical joint fuscous; membrane dark ochraceous, the apex fuscous

Length 5 millim.

Hab. Ceylon (fide Dehrn). Burma; Rangoon.

- B. Anterior femora only annulated with black or castaneous
- Pamera punctulata, Motsch. (Plocnomerus) Bull Ser Nat Mosc 1863, p. 79.

Head, anterior lobe of pronotum, and scutellum black, posterior pronotal lobe ochraceous, with five dark fuscous fascie—one central and two on each lateral area; corium ochraceous much suffused and punctured with brown, the lateral margins pale impunctate, membrane subhvaline, much suffused with pale fuscous body beneath black; legs pale ochraceous, femora annulated with brown before apices; extreme bases and apices of tibie and apices of tarsi pale fuscous, antenne dark ochraceous, apical joint stramineous, apex of third joint and base and apex of fourth joint fuscous

Length $5\frac{1}{3}$ millim.

Hab. Ceylon (fide Motschoulsky) Burma (Coll. Dist), Bhamo (Fea).

772 Pamera geniculata, Motsch (Plociomerus) Bull. Soc Nat Mosc 1863, p 81

Head, anterior lobe of pronotum, scutellum and sternum piceous, greyishly pubescent, posterior pronotal lobe obscure castaneous, second and third joints of antennæ, apex of scutellum, corium and legs luteous, membrane subhyaline, with darker venation and small darker marginal spots, temora somewhat obsoletely subapically darkly annulate; bases of tibiæ piceous*, corium brownly punctate, lateral margins impunctate, a small impunctate greyish spot near apex of claval suture, abdomen beneath castaneous

Length 3 millim.

Hab. Ceylon (fide Motschoulsky) Burma; near Rangoon

C. Legs wholly ochraceous

773 Pamera scotti, Diet (n nom) A M N H (7) viii, p 479 (1901)
Diplonotus luridus, Scott, A. M N H (4) xiv, p 432 (1874),
nom præcce

Head, anterior lobe of pronotum, scutellum and sternum black, greyislily pilose; antennæ, rostrum, pronotal collar, posterior lobe of pronotum, apex of scutellum, corium, lateral margins of meso-and metasterna, posterior margin of metasternum and legs ochraceous; abdomen beneath pale castaneous, apical half of fourth joint of antennæ and two posterior marginal spots to corium (one at apical angle, the other a little above it) fuscous, membrane ochraceous, mottled with pale fuscous, and with a series of small marginal spots of the same colour, posterior lobe of pronotum with three brown fasciæ, one central and two lateral, corium and clavus longitudinally brownly punctate, lateral margins

^{*} Motschoulsky writes "tibiarumque apice nigro-piceis"

of cornum impunctate; an enclosed pale impunctate spot near unner angle.

Var. a Apical angular fuscous spot to corium continued along

apical margin

Length 5 millim.

Hab. Assam; Margherita (Coll Dist). Ceylon, Peradeniya (Green). Burma: Karennee (Fea).—Japan (Lewis).

774 Pamera flavipes, Motsch. (Plociomerus) Bull Soc Nat Mosc. 1863, p 80

Head and scutellum piceous, pronotum and body beneath dark castaneous; corium brownish-ochraceous, thickly darkly punctate; basal joint of antennæ, lateral margins of corium and legs luteous; membrane fuliginous, the veins paler; antennæ (excluding basal joint) fuscous, apical joint palely pilose; rostrum brownish

Length 5 millim

Hab Ceylon; Peradeniya (Green) Burma, Bhamo (Fea)

775 Pamera sobrina, Dist A M N H (7) viii, p. 480 (1901).

Head pale piceous; pronotum, scutellum and body beneath pale castaneous, corium, membrane, antennæ, rostrum and legs ochraceous, apices of the second and third joints of the antennæ and apical half of the fourth joint infuscated. Anterior lobe of the pronotum prominent, globose; corium punctate, its lateral margins pale, impunctate

Length 41 to 5 millim.

Hab. Calcutta (Atkinson Coll., Brit Mus) Ceylon (Lewis). Burma; Rangoon, Bhamo, Teinzo, Karennee (Fea)

Genus EUCOSMETUS.

Eucosmetus, Bergi Rev d'Ent xiii, p 156 (1894)

Type, E formosus, Bergr, from Java.

Distribution Oriental Region and Japan.

Anterior lobe of pronotum at least twice as long as posterior lobe, basal margin moderately concave; anterior tibiæ in the male more or less spinous beneath, head long, broad and somewhat flattened, constricted behind eyes, antennæ with the first joint reaching the apex of head As Dr. Bergroth remarks, Eucosmetus is allied to the Chilian genus Erlacda, but differs by the posterior portion of the head being destitute of tubercles, the first joint of the antennæ reaching the apex of the head, anterior tibiæ in male armed with three small spines, in the female unarmed

a. Anterior tibia in male prominently spined beneath

776. Eucosmetus insignis, Dist A M N. H (7) viii, p 482 (1901)
Head, pronotum, scutellum. membrane, body beneath and legs

black; corium pale reddish, with a very small sublateral spot near

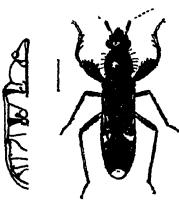


Fig. 39.—Eucosinclus insignis

base, a median lateral spot and the apical area very pale luteous, a black linear lateral spot between the pale median spot and apical area and a subapical angulate spot black; membrane with an apical, rounded, very pale luteous spot; apex of anterior femora and the whole of the anterior tibize and tarsi, basal halves of the intermediate and posterior femora and the tarsi, and central base of head beneath ochraceous; first joint of antennæ black, with its base luteous, remaining joints Head and posterior mutilated. lobe of pronotum coarsely punc-

tate; clavus and claval margin linearly punctate, anterior tibise curved, their apices moderately dilated and armed with two strong spines beneath.

Length 64 millim.

Hab. Assam; Margherita (Ind. Mus. & Coll. Dist.).

b Anterior tibue in the male obscurely spined beneath.

777. Eucosmetus incisus, Walk (Rhyperochromus) Cat Het. v, p. 100 (1872); Dist A. M. N. H. (7) viii, p. 483 (1901)

Black, finely pilose, posterior lobe of pronotum somewhat longly greyishly pilose; corium, trochanters, bases of femora, extreme apices of anterior femora, bases of anterior tibis and posterior margin of metasternum luteous; clavus piceous, with two medial linear ochraceous spots; extreme base, an oblique transverse fascia near middle, the apical angle and apical margin of corium black; corium (excluding lateral margin) distinctly punctate, anterior femora incrassate, strongly spined beneath, anterior tibis in male with four very short spines on inner margin of apical half.

Length 7 millim.

Hab. Assam; Margherita. Ceylon (Thwastes, Green)

Genus CARIDOPS.

Caridope, Bergr. Rev. d'Ent. xui, p. 158 (1894)

Type, C. gibba, Bergr.

Distribution. British India.

Head more or less triangular; eyes longly exserted, stylate; pronotum with the anterior lobe strongly globese, twice as long pronotum lobe, transverse incision profound, lateral angles sub-

prominent; scutellum small, subtriangular; greatest lengths of corum and membrane about equal; membrane extending a little beyond the apex of the abdomen: anterior femora strongly increasate, spined beneath near apex, anterior tibiæ prominently notched at apex, preceded by a distinct spine; rostrum almost reaching the intermediate coxæ, first joint not quite so long as head; anterior coxæ with a long distinct spine; antennæ slender, third and fourth joints a little stoutest, first joint just passing apex of head.

778 Caridops gibba, Bergi. Rev. d'Ent. xm, p. 159 (1894)

Head, pronotum, scutellum, rostrum and body beneath black;

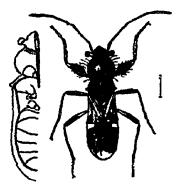


Fig 40.—Caridops gibba

rostrum and body beneath black; clavus black, the margins and a central streak luteous; corium pale luteous; two fascia-like streaks a little beyond base and apical angle continued along apical margin black; a broad transverse castaneous submedial fascia, outwardly margined with black and containing a small pale luteous spot near inner angle; membrane piceous, broadly white at apex; legs black; apices of anterior femora, basal areas of intermediate and posterior femora and the tarsi luteous; antennæ with the first and second joints brownish ochraceous, third and

fourth fuscous, first annulated with luteous near base; lateral margins of pronotum and anterior femora very longly pilose.

Length 5 millum.

Hab. Bombay (Wroughton).

I am indebted to Dr. Bergroth for the opportunity of figuring this species.

Genus and species not seen by the writer, and therefore not included in Synopsis of Genera.

Genus FONTEJANUS.

Fontejanus, Bredd Soc. Entomol xviii, p. 75 (1903).

Type, F. warmanni, Bredd.

Distribution. Bombay.

Head with moderately large eyes forming an almost equilateral triangle, rather narrower than the pronotum, hind border of eyes touching anterior margin of pronotum; occili touching the inner margin of eyes; pronotum longer than breadth between lateral angles, near hind margin sharply and distinctly constricted, the posterior area almost flat, thickly punctured, shove the base of

scutellum slightly excavated, front area impunctate and shining, rather strongly convex, not margined, broadest about middle, in front with a very short detached collar, scutellum distinctly longer than broad; anterior femora very strongly incressate, armed beneath with spinules, especially in the terminal half; front tibix considerably shorter than the femora, strongly curved, towards the apex rather compressed and widened, and on the lower side just before apex with one long spur-like spine, middle femora slender, below with numerous short spinules arranged in rows, first joint of hind tarsi twice as long as two other joints together; rostrum extending beyond middle coxe, first joint longer than head; first joint of antenna extending considerably beyond apex of head, second joint longer than third

Nearly allied to Fontejus, Stal, and Eucosmetus, Bergr

779. Fontejanus wasmanni, Biedd. Soc. Entomol xviii, p 75 (1903)

Shining black or piceous-black; sternum, rostrum, legs and antennæ dull rusty-brown or dirty brownish-yellow, pronotum and middle upperside of anterior femora dark pitchy-brown; posterior area of pronotum rusty-brown, with darker punctuation and blackish lateral angles, hemelytra whitish with scattered black dots; base of clavus, some suffused markings on basal half of corrum and its apical angle black; a dirty reddish-brown transverse band running through behind the middle of conum, membrane dark fuliginous. antennal joints three and four (except-

ing base) and apices of anterior tibiæ blackish-brown

d. Brachypterous, shining; head above moderately and thickly punctured, anterior area of pronotum about three and a half times as long as the hunder area in the middle, scutellum with lustre, hirsute, indistinctly punctured; hemelytra with a short, almost semicircular membrane extending to the base of the fifth abdominal segment, the distinctly separated clavus with a continuous row of dots; second joint of antennæ about twice as long as the first and hardly longer than the fourth, third joint about two-thirds as long as second joint, first and second joints of rostrum about equally long, third joint about two-thirds as long as second, fourth joint much the shoriest.

Length 44 millim. Hab Khandála, near Bombay (fide Breddin)

Division RHYPAROCHROMARIA.

Rhyparochromaria, Stall, En Hem w, p. 142 (1874)

Pronotum without, or very seldom with, an anterior collar; seldom constructed behind the middle, or if so constructed then with its margins carinate; lateral margins of the pronotum carinate, but not or very slightly laminately ampliated.

This is the largest division of the Aphanine and is universally distributed, though the majority of the known genera and species belong to the Palearctic Region—a fact, however, which probably only represents the greater activity of collectors in that region.

To arrange the Rhuparoch omaria generically is a work of no little difficulty. The species are not only small, but frequently received in a mounted or carded condition, which renders the examination of some characters practically impossible. Those, however, relied upon in the following synopsis should make the discrimination of the British Indian genera a work requiring little trouble, and it must be remembered that we are now dealing exclusively with this fauna.

Synopsis of Genera. A. Head distinctly exserted, eyes inserted at some distance from anterior margin of pronotum • • • Primierus, p 60 B Head not exerted, immersed to about the a. Head including eyes much more than half the width of pronotum at base a Pronotum transversely constructed Pronotum constricted near middle. a² Corium angulated on apical margin, antennæ not clavate RHODIGINUS, p 62 b² Corrum with apical margins straight, antennæ with third and fourth APPOLONIUS, p 62 joints clavate b'. Pronotum constricted nearer posterior [p 63 than anterior margin Prostemuidea, b Pronotum not transversely constricted a'. Eves touching anterior margin of pro-Budæus, p 76 notum b'. Eyes well separated from anterior margin of pronotum CRITOBULUS, p 77 b. Head including eyes not half width of pronotum at base or not much more than half. a Pronotum considerably or distinctly longer than half the width at base a'. Pronotum about as long as broad; head narrower than anterior margin of pronotum Policrates, p. 64 ... b' Pronotum not so long as broad. a² Head much narrower than anterior margin of pronotum ... Bosbfquius, p 64 Head with eyes as wide, or scarcely as wide, as anterior margin of pronotum a Fourth joint of antenne as long as second or longer.

Second and third joints of ros-[p 68 trum subequal in length.... LACENOPHORUS, b. Second joint of rostrum a little LAMPRODEMA, p 71 longer than third

Ù

 b² Head with eyes a little wider than anterior margin of pronotum. b³. Fourth joint of antenne shorter than second. Pronotum very little longer than half the width at base. 	Mizaldus, p 68
a. Pronotum transversely constricted a. Lateral margins of pronotum strongly	
sinuate at region of constriction.	
a. Scutellum much shorter than half	
the length of abdomen	
at. Antennæ robust, antennal joints	O OF
almost uniformly thick	Sinierus, p 65
b. Antennæ slender, apical joint incressated	Entisberus, p 66.
b ³ Scutellum very large, nearly half	THE LEGISTRES P. CO.
as long as abdomen.	Lemnius, p. 66
b2. Lateral margins not, or obscurely,	
sinuate at region of constriction	
c ² . Scutellum excavated	Arelanus, p. 74.
d' Scutellum not excavated	
a'. Comum with veins very prominent, clavus linearly marked,	
mak mumakaka	Suffenus, p 75.
b'. Cornum and clavus punctate	ouzzmien, k
a ² . Posterior margin of pronotum	
concavely sinuate.	
a ³ . Scutellum only slightly lon-	C
ger than broad	CLIGENES, p. 72.
b'. Scutellum distinctly longer than broad	(p 76. Prriterchus,
b ² Posterior margin of pronotum	[p 70.
truncate	TROPISTETHUS,
6'. Pronotum not transversely constricted	•
a ² . Lateral pronotal margins smuate,	04
posterior pronotal margin concave.	Thebanus, p 67
b. Lateral pronotal margins not sinuate, posterior pronotal margin truncate	DINIELLA, p 78.

Genus PRIMIERUS.

Primierus, Dist. A. M. N. H. (7) viii, p. 477 (1901)

Type, P. bispinus, Motsch. Distribution Oriental Region.

Head moderately long and slender, almost as long as the pronotum, pointed in front, the central lobe produced before the lateral lobes; antennæ with the basal joint stout, reaching for about half its length from the apex of the head, second longest and slender, third slender, shorter than second, and very slightly clavate at apex, fourth slightly thickened, about as long as third or a little shorter; rostrum about reaching the posterior coxe, basal joint shorter than the head. Pronotum with a narrow collar, strongly constricted near middle, the anterior lobe moderately

globose and a little shorter than the posterior lobe; posterior margin before scutellum concave, lateral angles distinctly spinous, the spines directed backwards. Other characters generally as in *Prosomocus*, Scott (of Japan), from which *Primierus* differs by the longer rostrum, the spinous lateral angles of the pronotum, and by having the intermediate and posterior femora more slender, not spically clavate, and both without spines.

780. Primierus bispinus, Motsch. (Plociomerus) Bull Soc Nat. Mosc. 1863, p 81: Dust A. M N. H (7) vni, p 477 (1901)

Brownish-ochraceous; apex of rostrum, apical joint of antennæ

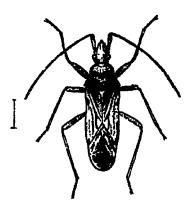


Fig 41 -Primierus bispinus

and apex of third joint, extreme apices of the tibic and apices of the tarsal joints piceous or black: femora strongly punctured with castaneous; head and anterior lobe of pronotum brownish, posterior lobe of pronotum paler, very coarsely punctate, the posterior lateral margins luteous; scutellum with some castaneous markings and with a central luteous fascia on apical half; clavus and posterior claval margin longitudinally punctate, posterior lateral area of corium paler, punctate, and preceded

by a small luteous lateral spot; membrane somewhat mottled with dark castaneous, a paler spot at apex and on each lateral margin Pronotal lateral spines distinct and directed backwards.

Length 7; breadth between pronotal angles 13 millim. Hab. Ceylon (Lewis).

781. Primierus indicus, Dist A M N. H (7) viii, p. 478 (1901).

Brownsh-ochraceous; antennæ, head, anterior lobe of pronotum. scutellum, legs and abdomen beneath reddish-ochraceous; apical joint of antennæ and the sternum piceous, lateral margins of meso-and metasterna and the abdomen ochraceous

Allied to the preceding species (P. bispanis), but differing by the scarcely punctate femora, different colour of the legs, &c.

Length 6 to 7; breadth between pronotal angles 13 millim. Hab Calcutta (Atlanson Coll., Brit Mus)

Genus RHODIGINUS.

Rhodiginus, Dist. A M N. H (7) viii, p. 485 (1901)

Type, R dispar, Walk Distribution Ceylon

Head triangular, rather narrowed in front; eyes large, prominent, somewhat exserted, their posterior margins almost touching the anterior margin of the pronotum, antennæ moderately robust. first and fourth joints thickest, third joint minute, pronotum strongly sinuated laterally, transversely impressed about centre, the lateral angles obtusely rounded, posterior margin slightly concave, anterior margin nearly straight; scutellum moderately gibbous at base, with a central carmate line on apical half; corium short and narrow, truncately angulate near inner angle, barely occupying two-thirds the length of the abdomen, membrane very large, extending broadly from the apex of the clavus to the apex of the abdomen; rostrum reaching the intermediate coxe anterior temora unarmed and only moderately incrassate

782. Rhodiginus dispar, Walk (Ophthalmicus) Cat. Het v, p 139 (1872), Dist A M N H (7) vii, p 485 (1901). Geocoris ceylonicus, Leth & Sev Cut Gén Hém. 11, p 169 (1894)



Fig 42 Rhodiginus dispar

Head, anterior lobe of pronotum, scutellum and body beneath black, head greyishly pilose; apex of scutellum brownish-ochracous; posterior lobe of pronotum, corium, antennæ, rostrum and legs ochraceous; first and fourth joints of antennæ and basal joint of rostrum more or less castaneous; posterior lobe of pronotum and the corum thickly brownly punctate; a cluster of punctures near inner angle of corium and the membrane fuscous; third joint of antenne minute; lateral margins of pronotum carinate.

(The unique typical specimen has the antennæ abnormal, the short third joint

being absent in the left antenna)

Length 21 millim.

Hab. Ceylon (Thwaites), Pundaluoya (Green)

Genus APPOLONIUS

Appolonius, Dist. A M N H (7) viii, p 484 (1901)

Type, A concucornes, Walk

Distribution. Ceylon.

Head (including outer margins of eyes) a little broader than anterior margin of pronotum; eyes prominent, globose, ocelli situate very near eyes, antennæ with the third and fourth joints prominently clavate, second, third and fourth joints

subequal in length, first a little shorter. Pronotum strongly and transversely constructed, the anterior lobe a little longer than the posterior lobe, but narrower and globose, posterior lobe with its lateral margins oblique; scutellum with the basal area moderately tumescent; anterior femora moderately incrassate.

783. Appolonius cincticornis, Walk (Ophthalmicus) Cat Het v, p 138 (1872), Dist A. M N H (7) viii. p 484 (1901)

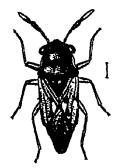


Fig 43—Appolonius cincticornis

Head and anterior lobe of pronotum black; the posterior lobe dark castaneous, with its anterior lateral margins luteous; antennæ with their bases and second joints luteous, with their bases and apex of the second joint pale castaneous, third and fourth joints castaneous, apex of fourth joint much paler, scutellum piceous; corium pale luteous, with the apex and a broken central transverse fascia castaneous; membrane pale cretaceous—white, with the veins brownish; legs ochraceous, tibiæ luteous

Length 23 millim.

Hab. Ceylon (Thwaites).

Genus PROSTEMMIDEA

Prostemmides, Reut Ent Month. Mag. xxix, p 252 (1893)

Type, P mimica, Reut. Distribution British India

Oblong; head inserted to the eyes, vertically deflected, with eyes a little narrower than anterior margin of pronotum; rostrum reaching the intermediate coxe; antenne with the first joint reaching the apex of the head; pronotum as broad as long, behind middle strongly constricted, lateral margins of anterior lobe moderately convex; scutellum longer than broad, anterior temora

moderately incrassated, spined beneath.

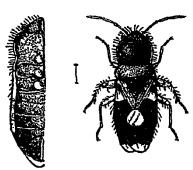


Fig 44.—Prostemmidea mimica.

784. Prostemmidea mimica, Reut Ent Month Mag xxix, p 253 (1893)

Black, shining, more or less setose, posterior lobe of pronotum ferruginous-red, the lateral angles marginally infuscated; corium very pale ochraceous, base of clavus, a subbasal discal spot, and the apical third black, the last distinctly divided in hue the apical angle shining,

the anterior area opaque; membrane black, a large basal spot

and the apical margins broadly white; antenne, rostrum and legs pale testaceous; apices of temora more or less infuscated. posterior lobe of pronotum very strongly punctated.

Leogth 5 millim.

Hab Bombay (Wroughton).

I am indebted to the courtesy of Dr. Bergroth for the opportunity of figuring this species

Genus POLYCRATES

Polycrates, Stal, Hem Afr. 11, pp 154 & 161 (1865), 1d En. Hem iv, p. 155 (1874)

Type, P. consulus, Germ, a South-African species

Distribution. South Africa; British India.

Head much narrower than the anterior margin of the pronotum, anterior femora incrassate, distinctly spinous beneath; scutellum distinctly longer than broad; pronotum longer than broad, behind middle strongly constricted, anterior lobe about twice as long as posterior lobe, anterior tibine distinctly curved, their anices prominently ampliated.

785. Polycrates nexus, sp n



Fig. 45 Polycrates nexus

Black, shining; cornum brownish-ochraceous, crossed beyond middle by an irregular transverse fascia connected with an angulate apical margin, black; membrane fuscous with an apical greyish spot, intermediate and posterior tibue ochraceous, their apices narrowly black, anterior tibie mutilated in specimen described; antenna and rostrum brownish-piceous, anterior lobe of pronotum with the anterior and lateral margins narrowly brownish-ochraceous, posterior lobe finely granulate, scutellum with a narrow central longiimpression, anterior femora tudınai strongly spined beneath

Length 7 milim.

Hab. Kangia Valley (Dudgeon) Burma, Minhla (Comotto)

Genus BOSBEQUIUS, not.

Type, B latus, Dist.

Distribution. Tenasserim.

Broadly subovate; head small, contrally produced, much narrower than anterior margin of pronotum; basal joint of antennæ not reaching apex of head, second joint a little the longest, first joint of rostrum extending beyond base of head; pronotum very large and broad, transverse impression indistinct, anteriorly subglobose, posterior margin moderately concave in front of scutellium, broader

than anterior margin, which is centrally truncately excavate, the angles prominent, lateral margins finely laminate; scutellum triangular; corium broad, longer than membrane; anterior femora very strongly incrassate

786. Bosbequius latus, sp. n

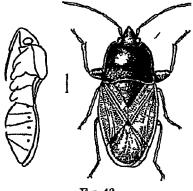


Fig 46
Bosbequius latus.

Head. pronotum, scutellum and body beneath black, shining; antennæ, posterior margin of pronotum, rostrum, lateral margins of sternum and femora castaneous; corium, tibiæ and tarsi ochraceous, membrane very pale fuliginous, subhyaline; head and anterior lobe of pronotum glabrous; posterior pronotal lobe, scutellum and corium somewhat coarsely punctate; membrane slightly passing abdominal apex

Length 4 millim.

Hab. Tenasserim; Plapoo (Fea).

Genus SINIERUS.

Sinierus, Dist A M. N. H. (7) ym, p 498 (1901)

Type, S capensis, Dall, from South Africa Distribution Ethnopian and Oriental Regions.

Head with eyes a little broader than anterior margin of pronotum; antennæ robust, moderately incrassate, basal joint passing the apex of head, third joint not longer than first; pronotum transversely constricted near middle, lateral margins convex, sinuate at area of constriction, each lobe slightly gibbous, posterior angles moderately rounded, scutellum a little broader than long, moderately excavate at base; legs unarmed, anterior femora not incrassate



Fig 47.—Sinierus cingalensis

787 Sinierus cingalensis, sp n

Piceous; corium ochraceous, with an elongate spot near inner angle and the discal area beyond base suffused with piceous; membrane obscure ochraceous; femora castaneous, the tibiæ and tarsi stramineous; antennæ castaneous; head, pronotum and scutellum with a velvety appearance, antennæ and lateral margins of head and pronotum pilose.

Length 2 millim.

Hab. Ceylon, Peradeniya (Green) Burma; Karennee (Fea).

Genus ENTISBERUS.

Entisberus, Disl A. M N H (7) x1, p 74 (1903)

Type, E archetypus, Dist Distribution. Ceylon

Subelongate, head triangular, narrowly produced anteriorly, where it is bicarinate; eyes moderately large and prominent, somewhat exserted, their posterior margins almost touching the anterior margin of the pronotum, antennæ robust, apical joint thickened, third joint about as long as first; rostrum almost reaching the intermediate coxæ, basal joint a little shorter than head, pronotum with the posterior lobe much wider than the anterior lobe, central constriction well defined, anterior lobe subglobose, posterior angles subprominent and obtusely subacute, their basal margins obliquely excavate, scutellium with a discal cruciform elevation, corium extending to more than half the length of abdomen, the apical margin slightly rounded, membrane slightly passing the apex of abdomen, femora unarmed

788. Entisberus archetypus, Dist A M N H (7) xi, p 74 (1903)

Head, anterior lobe of pionotum and body beneath black, posterior lobe of pronotum and corium ochraceous, punctured with brown, the first thickly punctate, the corium with the

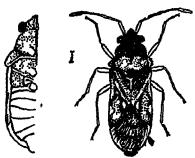


Fig 48.—Entisberus archetypus

clavus, claval margin, irregular transverse fascia and apex thickly punctate, enclosing a small palespotat inner angle and another on lateral margin a little before apex, scutellum piceous, coarsely punctate, the cruciform carination ochraceous, membrane hyaline, antennæ, rostruia and legs pale stramineous, apical joint of antennæ roseate, coxæ black; lateral angles of metasternum and anal segment castaneous body beneath

sparingly and finely greyishly pilose. Antenne with the first joint a little thickened, second joint slender, about as long or a little longer than the first, third shorter than second, thickened towards apex, fourth shortest, stoutest, globose

Length 3 millim

Hab. Ceylon, Peradeniya (Green).

Genus LEMNIUS, nov

Type, L ovatue, Dist. Distribution Ceylon.

Elongate, ovate, head triangular, narrowly produced anteriorly, antennæ with the first joint passing the apex of the head, a little thickened, second longest, fourth not thickened, rostrum reaching posterior coxe, first joint not extending to base of head, pronotum narrowed from base to apex, transversely constricted, the disk

sulcate, lateral angles tuberculously subprominent; scutellum very large, nearly half as long as abdomen, with a discal cruciform elevation; corium extending to more than half the length of abdomen, the apical margin straight; membrane slightly passing the apex of abdomen; femora unarmed.

789 Lemnius ovatus, sp n

Head, anterior lobe of pronotum, scutellum and body beneath

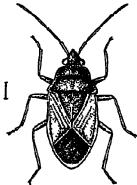


Fig 49 —Lemnius oratus

shining piceous; posterior lobe of pronotum and femora castaneous; corium ochraceous, darkly punctate, the apical margin (broadest near inner angle) castaneous; tibiæ and tarsi ochraceous; antennæ piceous, second and fourth joints ochraceous, head, pronotum and scutellum coarsely punctate, corium more sparingly punctate; membrane dark violaceous, its apical margin pale hyaline; pronotum foveately sulcate on disk, its lateral angles subprominent and ochraceous.

Length 4 millim. Hab. Ceylon (Lewis).

Genus THEBANUS, nov.

Type, T. politus, Dist. Distribution Burma.

Allied to Lemnus, but the pronotum not transversely constricted; scutellum smaller, not nearly half so long as abdomen, with a discal cruciform elevation on each side of which the lateral areas are somewhat convexly gibbons.

790. Thebanus politus, sp n

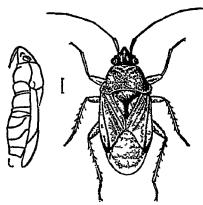


Fig 50 - Thebanus politus

Head black; antennæ castaneous; pronotum ochraceous, brownly punctate, a subanterior transverse fascia and central longitudinal line castaneous; scutellum ochrabrownly punctate. ceous. with a central arcuate dark castaneous fascia reaching apex and basal angles, two oblique discal pale ochraceous impunctate spots; corium strammeous, the apical angles membrane subfuscous, hyaline; sternum castaneous; abdomen ochraceous; lateral and posterior margins

sternal segments and legs pale luteous, head, pronotum and

scutellum coarsely punctate, corrum more finely punctate; centra sulcation to pronotum very indistinct.

Length 3 millim

Hab. Burma; Karennee (Fea).

Genus MIZALDUS.

Mizaldus, Dist. A M. N H (7) vm, p 483 (1901)

Type, M. dimidiatus, Walk., from New Guinea.

Distribution. Ceylon; New Guinea.

Head triangular, long, immersed to about the eyes, ocelli situate close to eyes and well separated from base; antennæ with the first joint moderately clavate and considerably passing the apex of head, second joint longest, fourth a little shorter than third and moderately thickened; pronotum with the anterior margin narrower than the outer margins of eyes, its anterior angles a little prominent, a little more than half the width of base, the lateral margins very strongly sinuate, transversely constricted near centre, the anterior lobe moderately globose, the posterior lobe with its basal margin moderately concave before the scutellum; lateral angles excavated; scutellum moderately gibbous at hasal area, its apex acute; corium a little narrower than the abdomen, the margins of which are exposed and a little prominent, strongly sinuate near base and widened posteriorly; rostrum with the basal joint a little shorter than the head; second joint longer than the third.

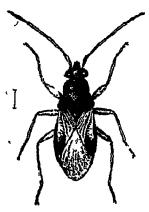


Fig 51,-Misaldus lewisi.

791 Mizaldus lewisi, Dist A M N H (7) viii, p 484 (1901)

Black, corum creamy-white, with an apical angular black spot, membrane pale greyish-hyaline: body beneath black, legs and antennæ ochraceous, femora and basal joint of antenna pale castaneous, apical joint of antenna Head, pronotum and scutellum coarsely punctate, clavus and lateral area of corrum more sparingly punctate.

Length 4 millim.

Hab Coylon (Lewis). Burms, Bhamo, Karennee (Fea)

Genus LACHNOPHORUS.

Lanchnophorus (misprint), Reut. Ent. Tidskr. viu, p 98 (1887).

Type, L. singalensis, Dohrn. Distribution Madagascar and British India. Body oblong, subparallel, pubescent, and above longly pilose;

head triangular, with eyes about equal in width to anterior margin of pronotum; ocelli placed close to anterior pronotal margin; rostrum extending to middle of mesosternum, first joint shorter than head, antennæ with the first joint passing apex of head, fourth joint as long as the second or longer; pronotum transverse, anteriorly slightly narrowed, anterior margin sinuate, lateral margins laminate and suberect and rounded at apices, transverse impression nearer posterior than anterior margin; scutellum elongately triangular; anterior femora incrassate, distinctly spined beneath near apices, two of the spines usually large

a. Antennal joints moderately uniform, third and fourth joints not prominently incrassate.

792 Lachnophorus singalensis, Dohrn (Rhyparochromus), Stett ent Zeit xu, p 404 (1860) Rhyparochromus semilucens, Walk Cat Het v, p. 99 (1872) Lachnophorus guttulatus, Reut Ent. Tidskr vin, p 99 (1887) Rhyparochromus convelatus, Dist A M.N H (7) vin, p 485 (1901)

Head, antennæ, pronotum, scutellum, rostrum, body beneath



singalensis

and legs piceous; lateral margins of pronotum, coxe, posterior margin of metasternum, extreme bases of tibiæ and the tarsi ochraceous; corium ochraceous with lineate brown punctures, apical half piceous, containing a transverse greyish-white fascia; membrane piceous, its apical half irrorated with pale brownish. Antennæ moderately robust, second, third and fourth joints almost subequal in length; pronotum with a distinct transverse impression, anterior lobe moderately convex, posterior lobe somewhat thickly punctate; scutellum long, finely punctate, with a central carmate line, obsolete on basal half; lateral Fig 52 - Lachnophorus margins of head and pronotum distinctly

longly pilose. In some specimens, as in the form described by Walker as semilucens, the

body beneath is pale castaneous

Length 5 to 8 millim

Hab Bombay (Coll Dist), Bor Ghat (Dixon). Ceylon (fide Dohrn) -Madagascar (fide Reut.)

Dr Bergroth kindly forwarded me a Bombay specimen which he had compared and identified with Reuter's Madagascar type

793. Lachnophorus noctis, sp n

Piceous; apical joint of antennæ greyishly pilose; posterior lobe of pronotum and veins of corium obsoletely castaneous, legs black, shining: body beneath more palely piceous; antenne slender, third and fourth joints not incrassate; corium and posterior area of pronotum somewhat coarsely punctate, clavus longitudinally punctate.

Length 61 millim.

Hab. Burma; Karennee (Coll. Dist).

b Antennæ with the this d and fourth joints prominently incressate

794. Lachnophorus leucospilus, Wall. (Rhyparochromus) Cat. Het. v, p 98 (1872)

Piceous; apical area of corium black, containing a transverse whitish spot; a pale whitish spot at apex of membrane, basal lateral margin of corium ochraceous; antennæ very robust, third and fourth joints distinctly increasate; head finely greyishly pilose; posterior lobe of pronotum sparingly but coarsely punctate

Length 6 millim.

Hab Sylhet (Bowring). Burma, Karennee (Fea)

795. Lachnophorus merula, sp. n

Black, opaque; a spot on lateral margins of pronotum at the region of the constriction and basal lateral area of corium ochraceous, a spot before apex creamy-white; clavus piecous, antennæ robust, third and fourth joints distinctly clavate; pronotum sparingly coarsely punctate, the lateral margins a little upwardly carinate and subampliate, transversely constricted a little behind middle, apex of scutellum distinctly carinate; clavus longitudinally punctate; corium (excluding lateral margin) sparingly punctate.

Length 6½ millim Hab. Burms, Karennee

Genus TROPISTETHUS.

Tropistethus, Fieb. Eur Hem pp. 48 & 184 (1861); Stal, Ofv Vet.-Al. Forh 1872, no. 7, p 52

Type, T. holosericeus, Scholtz, a Palæarctic species.
Distribution. Palæarctic, Oriental, and Neotropical Regions.

Differs principally from Lachnophorus and Rhyparochiomus by the anterior femora being only shortly and regularly spinous near apex, not also provided with a single prominent spine, second joint of the rostrum much longer than the third; the pronotum is also shorter.

796. Tropistethus indicus, Dall (Aphanus) Let Hem ii, p 359 (1852), Dist A M N H (7) viii, p 497 (1901)



Fig 53
Tropistethus indicus

Head, thorax and scutellum pitchyblack, corium brownish-testaceous, punctured, pubescent, with a triangular brown spot at the inner apical angle; membrane brownish: body beneath pitchy; legs pale yellow; rostrum pale yellow; antennæ testaceous with the last joint yellow. (Dallas.)

Length 4 millim.

Hab "North India" (Capt. Boys).

Genus LAMPRODEMA.

Lamprodema, Fieber, Eur Hem pp 48 & 184 (1861), Stål, Ofv. Vet -Al. Forh. 1872, no 7, p 53

Type, L. maura, Fabr, a Palæarctic species.

Distribution Palmarctic, Oriental, Australasian, and Neotropical

Regions.

Pronotum not depressed posteriorly, strongly transverse; clavus somewhat distinctly punctate in four longitudinal series; second joint of rostium very slightly longer than third joint.

797. Lamprodema tineoides, Dist A. M N H (7) vm, p. 500 (1901).

Dark castaneous; head, anterior half of pronotum and scu-



Fig 54 —Lamprodema tineoides

tellum black; autennæ, posterior margin and apical angles of pronotum, basal margins of corium, tabiæ, tarsi and apices of femora brownish ochraceous; apical joint of antennæ infuscated; head, anterior area of pronotum and the scutellum finely punctate, posterior area of the pronotum and the corium coarsely punctate, membrane somewhat rudimentary, obscure greyish, apex of exposed abdomen black

Length 2½ millim.

Hub Ceylon (Lewis).

I. have placed this species in the genus Lamprodema, though the characters of the head including eyes being much narrower than the anterior margin of the pronotum, combined with the rudimentary membrane, almost warrant the foundation of a new genus for its reception.

·Genus CLIGENES

Cligenes, Dist Biol Centr.-Amer., Rhynch. 1, p 405 (1893); Bergr Rev d'Ent xiv, p. 142 (1895) Salacia, Stäl, En. Hem iv, p 156 (1874), nom. præcce

Typė, C. diluticornis, Stal, a Brazilian species

Distribution. Neotropical, Nearctic, Oriental, Ethiopian, and

Australasian Regions.

Hend of ordinary size, antennæ inserted near the eyes, basal joint passing the apex of the head, basal joint of rostrum not longer than basal joint of antennæ; pronotum short, transverse, base broad, nearly twice as broad as head including eyes, near or behind middle obsoletely transversely impressed, lateral margins near middle slightly sinuated; scutellum not, or a little, longer than broad; corium with the apical margin straight or profoundly sinuate

a Pronotum with the transverse impression nearer to the posterior than to the anterior margin

798. Cligenes signandus, Dist. (Salacia) Ann Soc. Ent Belg 1903, p 46.

Strammeous; anterior lobe of pronotum and scutellum (excluding

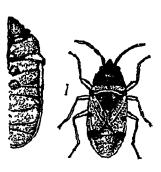


Fig 55 - Cligenes signandus

apex) castaneous, head piceous, greyishly pilose; a spot at lateral angles of pronotum, a spot at centre of lateral margin to corium and the apical angle of same black, membrane pale fuscous, the margins pale stramineous: body beneath castaneous, legs pale luteous, antenna brownish ochraceous, apices of the joints luteous; posterior pronotal lobe and the corium sparingly but coarsely punctate; apical margin of corium straight

Length 21 millim. Hab. Ceylon (Green)

799. Cligenes patricius, sp n.

Head and posterior lobe of pronotum castaneous, anterior pronotal lobe ochraceous with a central longitudinal castaneous fascia; scutellum piceous, its apex luteous, corium very pale stramineous, its apical angle fuscous, and with a small somewhat obsolete fuscous spot at about centre of lateral margin, membrane fuliginous, its margins very pale stramineous. body beneath piceous; legs stramineous; antennæ with the basal joint ochraceous, remaining joints brownish ochraceous, first and third, and second

and fourth joints subequal in length, apical margin of cornum straight

Length 2½ millim

Hab. Burma; Karennee (Fea).

b Pronotum with the transverse impression a little nearer to the anterior than to the posterior margin

800. Cligenes picturatus, Dist (Salacia) Biol Centr-Am, Rhynch i, p 406, pl axxv, f 19 (1893), Bergi Rev d'Ent xiv, p 143 (1895).

Head, pronotum and scutellum castaneous, apex of scutellum and the corrum ochraceous, the last with a small spot near the centre of lateral margin and the apex dark castaneous, membrane dull greyish; antennæ variable in hue, the first and fourth joints usually ochraceous; body beneath castaneous, legs ochraceous, antennæ with the second joint slightly longest, third and fourth subequal in length, clavus longitudinally punctate; the punctures on the corium are principally submarginal and subclaval; pronotum and scutellum coarsely punctate, apical margin of corium straight

Var a. Head, pronotum and scutellum black

Length 3 millim.

Hab Assam; Mungphu (Atkinson).—Originally described from Central America.

Genus DINIELLA.

Dinia, Stål, En Hem iv, p 156 (1874), nom præocc Diniella, Bergr Rev. d'Ent x11, p 202 (1893), n nom

Type, D. glabrata, Stål, from the Philippines Distribution Ethiopian and Oriental Regions.

Head large, as long or nearly as long as the pronotum; antennæ long, first joint not passing the apex of the head, third distinctly longer than first; basal joint of rostrum distinctly longer than basal joint of antennæ; pronotum not transversely impressed, and less broadened posteriorly than in Salacia.



Fig 56
Dimella secosa *

801. Diniella sevosa, *Dist* (Dinia) *A. M N H.* (7) viii, p 497 (1901)

Body above shining, oleaginous, head, pronotum, scutellum and body beneath black; posterior margin of pronotum and the femora castaneous, corium brownish ochraceous, with a discal castaneous patch; extreme apices of femora, the tibiæ and tarsi ochraceous, antennæ brownish-ochraceous, the apices of the first, second and third joints ochraceous; a lineate spot on each side of clavus near apex, and lateral margin of corium, luteous, antennæ with

^{*} Owing to the deflected position of the head in the typical specimen figured, the artist has been unable to show its relative length to the pronotum

the second, third, and fourth joints almost equal in length, pronotum glabrous, scarcely punctate, scutellum obscurely punctate; corium, excluding the lateral margins, distinctly punctate; tibus with their bases castaneous and clothed with long spinous hairs.

Length 4 millim. Hab. Ceylon (Lewis).

802. Diniella trabeata, Dist (Dinia) A M. N H (7) viii, p 498 (1901)

Above shining, glossy; head, pronotum, scutollum and body beneath very dark castaneous, apex of head, antenno, eyes, anterior margin and lateral angles of pronotum, apex of scutellum, corium and legs ochraceous, corium thickly and somewhat darkly punctate; membrane hyaline. Scutellum faintly wrinkled and obscurely punctate, antenno with the second joint much longer than the third, remainder mutilated.

Length 4 millim.

Hab. India; Nagpur (Coll. Dist.) Burma; Rangoon (Fea).

Genus ARRIANUS, nov.

Type, A. excavatus, Dist. Distribution. Sikhim.

Elongate, subovate; head narrowly pointed anteriorly, eyes touching anterior margin of pronotum, basal joint of antennæ scarcely passing apex of head, basal joint of rostrum shorter than second joint; pronotum a little broader behind than in front, transversely constricted behind middle, anterior lobe moderately

globose; scutellum elongate, foveate from near base to apex: corrum extending to about three-fourths the length of abdomen; legs moderate

A genus to be recognized by the extraordinary structure of the scutellum

803. Arrianus excavatus, sp n

Pale castaneous; lateral angles and posterior margin of pronotum, corium, membrane, tibies and tarsi ochraceous; antennæ pilose, second joint longest; posterior pronotal lobe and base of scutellum somewhat coarsely punctate, disk of corium finely punctate; membrane slightly passing abdominal apex.



I

Length 2½ millim. Hab. Sikhim, Mungphu.

Genns SUFFENUS, nov.

Type, S. fusconer vosus, Motsch. Distribution. Burma: Ceylon

Head immersed to eyes, and, including them, equal in width to anterior margin of pronotum, antennæ short, robust, first joint about reaching apex of head, pronotum broader than long, posterior margin nearly twice as broad as anterior margin, transversely constricted near middle, posterior lateral angles rounded; scutellum somewhat small, subtriangular; corium with the veins very prominent, clavus with longitudinal lines; anterior femora incrassated, rostrum with the second joint longer than the first, which does not quite reach the base of head, lateral margins of the corium a little convex.

804. Suffenus fusconervosus, Motsch (Rhyparochromus) Bull. Soc. Nat Mosc 1863, p. 79

Dark ochraceous, rufous, corium pale creamy-white, with the



Fig 58 Sufferns fusconcreosus veins, a spot on lateral margins and the apical angle rufous-ochraceous, between the last-mentioned markings is a distinct creamy-white spot; membrane creamy-white, suffused with pale ochraceous; scutellum darker rufous - ochraceous, punctate, pronotum transversely impressed near middle, where it is a little paler in hue, with a small crer my-white spot on each lateral margin; body beneath rufous-ochraceous (imperfectly seen in a can ded specimen), legs luteous

Length 21 millim.

Hab Ceylon, Colombo (fide Motschoulsky) Burma, Rangoon (Coll Dist.)

Genus PERITRECHUS.

Pentrechus, Fieber, Eur Hem pp 48 & 185 (1861), Stâl, Öfv Vet-Ak Forh 1872, no 7, p 5±, Saund Hem Het Brit. Islds p 95 (1892) Subg Pasatus, Stâl, Ofv Vet-Ak Park 1872, no 7, p 54

Type, P angusticollis, Sahlb, a Palæarctic species Distribution Nearctic, Palæarctic, and Oriental Regions

Head moderately large, narrowed in front of eyes, which slightly project beyond the anterior pronotal angles; rostrum reaching the intermediate coxe, pronotum trapeziform, lateral margins behind the middle narrowly foliaceous, posterior margin concavely sinuate, anterior femora more or less incrassated, armed beneath with a few small spines.

805. Peritrechus æruginosus, sp. n.

Head, anterior lobe of pronotum and scutellum black; scutellum with two discal spots and the apex ochraceous, posterior lobe of

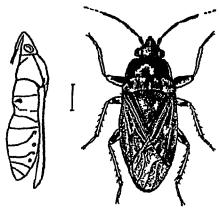


Fig 59 - Perierchus æruginosus

pronotum and the corum dull brownish-ochraceous, darkly punctate and much suffused with piceous, corium with some distinct paler spots, principally on apical membrane rusty brown · body beneath piceous; legs castaneous, the apices and undersides of femora, and the tibic and tarsı ochraceous, apices of posterior tibize distinctly piceous; antennæ and rostrum piceous, second and fourth joints of antennæ longest and subequal in

length, third a little longer than first; lateral margins of the scutellum near base a little gibbous.

Length 5 millim.

Hab Burma; Palon, Mandalay (Fea)

Genus BUDÆUS, nov

Type, B. brevipennis, Dist. Distribution. India, Seychelles

Subelongate, head strongly deflected anteriorly, about as long as the pronotum; rostrum nearly reaching the intermediate coxe, first joint a little shorter than second; antennæ with the first joint just passing apex of head, which is narrowed in front, eyes placed near the anterior margin of pronotum, pronotum moderately gibbous, lateral margins nearly straight, slightly convexly narrowed near anterior angles, anterior and posterior margins straight, scutellum narrow, elongate, hemelytra only reaching about half the length of abdomen, connexivum moderately upraised, legs moderate, anterior femora incrassate

This genus is founded on six apparently undeveloped specimens. The genus is allied to *Ischnocoris* and *Macrodema*. The species described by Walker from the Seychelles under the name *Rhyparochiomus circumcinctus* (Cat. Het. v, p. 97, 1872) I also consider

belongs to Budwus.

806. Budæus brevipennis, sp n

Black, shining, antennæ, lateral margins of hemelytra, lateral

and apical margins of scutellum, acetabula, coxe, legs and abdomen



Fig 60 Budeus brevipennis.

beneath luteous; abdomen above sangumeous, with some black spots beyond apex of hemelytra, head and pronotum glabrous, scutellum and hemelytra somewhat opaque; antennæ with the second joint slightly longer than either first or third joints

In some specimens the underside of

the abdomen is piceous. Length 3 to 3½ millim.

Hab United Provinces; Lohardaga (Atkinson Coll., Birt. Mus)

Genus CRITOBULUS, nov.

Type, C insignis, Dist. Distribution Assam.

Elongately subovate, head large, broad, including eyes as wide as long; eyes well separated from the anterior margin of the pronotum; antennæ with the basal joint shorter than the head and much shorter than the second joint; rostrum about reaching the porterior coxe, first joint much shorter than head; pronotum not transversely impressed, with a distinct collar, the lateral margins acutely ampliated but not reflexed, the anterior margin rounded towards apex; scutellum broad, equilateral, hemelytra reaching

about half the length of abdomen; anterior

femora strongly spined beneath

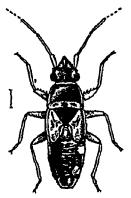


Fig 61 Critobulus insignis

807. Critobulus insignis, sp n.

Head, pronotum and scutellum piceous: apex of head and a spot in front of each eye and margins of pronotum (posterior margin broadest) luteous, the last marked with three piceous spots, corium luteous, the apex and some subbasal lines brownishochraceous; abdomen above piceous, connexivum alternately brown and luteous. body beneath castaneous, legs, rostrum and antennæ luteous, femora more or less tinged with castaneous, apices of tarsi piceous.

Length 4 millim. Hab. Assam: Margherita.—Siamese Malay States.

Species of uncertain position

Rhyparochromus brevs, Motsch. Bull Soc. Nat. Mosc. 1863, p. 78.

Described from Ceylon, but I have failed to identify it

Rhyparochromus? crassiceps, Dohrn, Stett. ent. Zeit xxi, p 404 (1860)

Another species described from Ceylon, which has also buffled my efforts to recognize it from the description

Division APHANARIA.

Beosaria, Gomanotaria, Lethearia, Drymaria, Stal, Öfv Vet.-Al. Foi h 1872, no. 7, pp 54, 58, 59, 1d (part.) En Hem 1v, p. 143 (1874).

Lateral margins of the pronotum laminately ampliated, rarely carinate; when they are carinate the basal joint of the antennæ is very largely extended beyond the apex of the head

This division is much smaller than the preceding one (Rhyparochromaria), but, like it, is almost universally distributed Our knowledge of its members is still fragmentary.

"	
Synopsis of Genera.	
A. Membrane near base obliquely transversely impressed, some veins transversely united B Membrane normal	Lетнæus, p. 87
a Head acuminate, half as long as pronotum	Gonsalvus, p 93
b Head of ordinary shape and size a Scutellum for eately impressed b Scutellum not forestely impressed	Drymus, p. 92.
a' Head with eyes narrower than	
a ² . Second joint of antennæ longest; posterior margin of pronotum more or less concavely sinuate, scutellum longer than broad	Gonatas, p 89.
52 Second and third joints of antenness subequal, posterior margin of pronotum straight, scutellum	Abdulominus, p 90
not longer than broad b' Head with eyes as broad as anterior margin of pronotum, but not	
broader, a ³ . Tibiæ with long bristles b ³ . Tibiæ without bristles c' Head with eyes broader than anterior	APHANUS, p. 79 SCOLOPOSTITHUS, [p 92]
margin of pronotum A. First joint of antennee passing apex of head; posterior legs of ordinary size	Dieuones, p 82

b. First joint of antennæ not passing apex of head, posterior legs very

as Pronotum longer than broad, basal joint of posterior tarsi about three times longer than the other two joints together

b. Pronotum not longer than broad; basal joint of posterior tarsi about twice longer than the other two joints together

Pœantius, p 85.

NAUDARENSIA, p 86.

Genus APHANUS.

Aphanus, Laporte, Ess Hem p 35, May Zool (1832), Saund

Hem Het Brit Islds p 100 (1892)

Pachymerus, Lep & Serv Encycl Méth. x, p 322 (1825), Stål, Ofv

Vet-Ak Forh 1872, no 7, p 57, id En Hem iv, p 159 (1874),

nec Thunb Coleopt 1805

Rhyparochromus, Fieber, Eur Hem pp 50 & 193 (1861)

Beosus, Feeber, Eur Hem pp 51 & 196 (1861)

Subg Microtomideus, Liolobus, Bleteogonus, Raglioides, Reut. Rev

d'Ent iv, pp 221, 224, 225 & 229 (1885)
Subg. Graptopeltus, Xanthochilus, Melandiscus, Raglius, Stâl, Oft
Vet -Ak Forh 1872, no 7, p. 57.
Subg Phoremus and Naphius, Stâl En. Hem iv, p 160 (1874)

Type, A. pedestris, Panz. A Palæarctic species which has been found in South Africa.

Distribution. Palearctic, Ethiopian, and Oriental Regions

Head short, triangular, eyes nearly or quite touching the anterior margin of the pronotum; first joint of antennæ passing the apex of head, pronotum broad, depressed, its lateral margins laminately ampliated, scutellum large, subtriangular, clavus variously punctured; membrane fully developed, anterior femora moderately thickened and spined, basal joint of the posterior tarsi twice as long as the other two joints together.

a Pronotum with apices of lateral margins not prominently rounded

808. Aphanus sordidus, Fabr (Cimex) Mant 11, p 302 (1787), id (Lygœus) Ent Syst 17, p 164 (1794); Dall (Rhyparochromus) List Hem 11, p 566 (1852); Stâl (Beosus), Hem Fabr 1, p 78 (1868), Dist A M N H. (7) viii, p 501 (1901) Var Rhyparochromus pallens, Dall List Hem 11, p. 567 (1852); Leth. & Sev (Dreuches) Cat Gén Hém t 11, p 220 (1894).

Head, anterior lobe of pronotum, base of scutellum and sternum piceous or dark castaneous; abdomen beneath pale castaneous; posterior lobe of pronotum, scutellum (excluding base) and corrum ochraceous, thickly punctured with brown, lateral margins of pronotum and corrum with only a few coarse punctures; apex of scutellum luteous; legs ochraceous, femora (excluding bases) and the tibue punctured and mottled with brown,

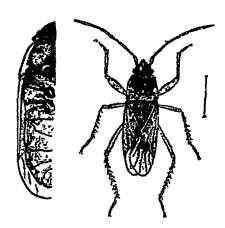


Fig 62 - Aphanus sordidus

membrane fuliginous, with a dark castaneous spot at base, antennæ pale ochraceous, apex of third joint infuscated, fourth fuscous. with ıts luteous; rostrum ochraceous, the basal joint castaneous, the apex piceous, lateral and posterior margins of prosternum, two spots on posterior margin of metasternum, margins of acetabula and lateral marginal spots to abdomen luteous.

Length 9 to 10 millim.

Hab. Assam; Nága and
Khási Hills (Chennell)

Bengal; Ranchi (Irvine), Calcutta. Bombay (Leith); Bor Ghát (Dixon) Ceylon (Green). Burma; Mandalay, Karennee, Prome (Fea), Minhla (Comotto), Tenasserim, Thagata (Fea).—China. Also recorded by Stål from Guinea.

The late Mr. L de Nicéville, under date of February 27, 1901, informed me that this species was "damaging severely the 'Tilli' or Sesamum crop" near Calcutta

809. Aphanus lineosus, Dist A M.N H (7) vm, p 503 (1901).

Head, anterior lobe of pronotum, scutelium and body beneath piceous, posterior lobe of pronotum and the cornum ochraceous, thickly brownly punctate; antennæ, lateral margins of pronotum, a narrow central line to the posterior pronotal lobe, two lineate spots near apex of scutellum lateral margins of cornum, two small spots on apical area of outer claval margin and the legs ochraceous, a spot at each lateral marginal angle of pronotum, two spots on apical marginal area of cornum, basal halves of anterior femora and apical thirds of posterior femora piceous or black; rostrum and lateral margins of meso- and metasterna ochraceous, antennæ with the basal joint and apices of second, third and fourth joints piceous, second and fourth joints of the antennæ about subequal in length, third slightly shorter, punctures of the cornum arranged in lineate series

Length 6 millim Hab. Ceylon (Lewis). Burma; Bhamo (Fea).

b. Pronotum with apices of lateral margins prominently rounded. 810. Aphanus orientalis, sp n



Fig 63
Aphanus orientalis

Dull ochraceous, coarsely brownly punctate, antennæ, central lobe of head, anterior disk of pronotum, scutellum and abdomen beneath pale castaneous; pronotum with the lateral and posterior areas thickly punctate, with scattered black dots on lateral margins; scutellum finely and thickly punctate; corium coarsely punctate, with scattered black dots on lateral margins and an oblique elongate black spot near inner angle; legs sparingly darkly punctate, anterior and posterior femora distinctly toothed beneath near apices; sternum coarsely darkly punctate; abdomen beneath thickly and finely punctate

Length 8 millim.

Hab. Bengal; Rauchi (Irvine) Behar; Shahabad. Mysore (Slater, Brit. Mus.).

811. Aphanus sparsus, sp n

Piceous, finely sprinkled with ochraceous; antennæ piceous, apical joint fuscous with its extreme base luteous; pronotum broad, the lateral margins amphated, a little recurved, ochraceous speckled with piceous; lateral margins of corium more prominently speckled with ochraceous, extreme apex of scutellum ochraceous; pro- and mesosterna ochraceous, thickly speckled with piceous; metasternum testaceous, with a sublateral ochraceous tascia speckled with piceous; abdomen testaceous, coxæ and legs ochraceous, femora speckled with piceous, posterior tibiæ fuscous; rostrum ochraceous, membrane pale fuliginous, basal area piceous, apical area mottled with fuscous.

Length 7 millim.

Hab. Bombay; Bor Ghát (Dixon).

812. Aphanus latus, sp. n

Ochraceous, thickly brownly punctate, head, a large discal transverse spot on anterior area of pronotum, basal area of scutellum, body beneath and femora (excluding apices) black; apices of femora, the tibiæ and tarsi, lateral and posterior margins of prosternum, and apex of scutellum luteous; antennæ ochraceous, second joint slightly longer than the third, third longer than fourth, rostrum ochraceous, basal joint castaneous: body broad, pronotal lateral margins distinctly ampliated; scutellum long, subtriangular, depressed near base; membrane brownish-ochraceous.

Length $7\frac{1}{2}$ millim.

Hab. Bor Ghát (Dixon). Burms; Rangoon (Coll. Dist)

vol. 11.

Genus DIEUCHES

Disuches, Dohrn, Stett. ent. Zest xx1, p 159 (1860); &&l, Ofv. Vet-Ak Fork 1872, no 7, p. 58; vd En Hem vv, p 159 (1874). Beosus, Bengr Rev d'Ent. xx1, p. 202 (1893)
Ischnotarsus, part, Fleben, Eur Hem. pv 50 & 191 (1861)
Metocus, Scott, A. M. N. H. (4) xxv, p 483 (1874)

Type, D syriacus, Dohrn, a Southern Palmarctic species Distribution. Palmarctic, Ethiopian, Oriental, and Australasian Regions.

First joint of the antennæ passing the apex of the head, not longer than the first joint of the rostrum; eyes extending a little beyond the anterior margin of the pronotum, pronotum long, more or less constricted near middle, the lateral margins carinate and laminate; legs long, anterior femora increasate and spined beneath.

A. Lateral margins of pronotum strongly sinuate.

a. Pronotum constructed behind middle.

813. Dieuches uniguttatus, Thunb. (Pendulnus) Hem. rostr. Cap. 1v., p. 6 (1892), Stâl, En. Hem. iv., p. 162 (1874). Pendulnus guttatus, Thunb. Ins. Hem. to ia gen. p. 5 (1825). Rhyparochromus bengalensis, Dall. List Hem. 11, p. 572 (1852). Dieuches yeh, Dohrn, Stett. ent. Zeit. xxi, p. 100 (1860).

Piceous; antennæ, second and third joints of rostrum, thue and tarsi brownish-ochraceous, apical joint of antenna piceous,

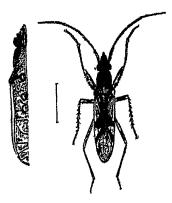


Fig. 64 - Dieuches uniguitatus

broadly annulated with luteous near base; corium ochraceous, brownly punctate, lateral margins impunctate, a broad irregular transverse fascia near inner angle and the apical margin black, a

;

central elongate spot on posterior lobe of pronotum, extreme apex of scutellum, trochanters, bases of femora, posterior angle of metasternum and a marginal spot on fourth and fifth abdominal segments dull luteous; membrane fulginous, speckled with ochraceous beyond base, and with a small ochraceous spot near the apical angle of corium; body pilose, lateral margins of pronotum and legs longly pilose. Pronotum strongly constricted near middle where the lateral margins are profoundly sinuate, anterior lobe subglobose; second, third and tourth antennal joints subequal in length.

Length 10 to 12 millim.

Hab. Assam, N. Khási Hills (Chennell). Bangalore (Cameron). Ceylon (Green & Lewis) Andamans (Coll. Dist.). Burma; Rangoon, Palon, Bhamo, Katha (Fea). Tenasserim; Malewoon (Fea)—Also recorded from several islands of the Malay Archipelago and from China

b Pronotum centrally constricted.

814. Dieuches fuscans, sp. n

Piceous, opaque; abdomen castaneous; antennæ, rostrum, anterior and lateral margins (narrowly) and a central carina to posterior lobe of pronotum, basal halves of lateral margins, basal angles and some obscure discal spots to corium, legs and two lateral marginal spots to abdomen ochraceous; apical angle to corium widely obscure whitish, extreme apical margin piceous; femora, excluding bases, infuscated; pronotum transversely constricted about middle, the lateral margins strongly sinuate, thickly, somewhat coarsely punctate, anterior lobe subglobose; corium, excluding lateral margins, sparingly punctate; membrane ferruginous

Length 13 millim.

Hab. Assam; Sibságar (Peal)

B. Lateral margins of pronotum not sinuate.

a. Pronotum as long as broad.

815. Dieuches leucoceras, Walk (Rhyparochromus) Cat. Het. v, p. 101 (1872).
Dieuches modestus, Horv Termész Füzetek, 1889, p. 36.

Head black; pronotum as long as broad, piceous or dark castaneous, two small linear luteous spots on anterior margin, lateral margins somewhat strongly laminate, not sinuate, nearly straight, luteous, posteriorly black or castaneous, posterior lobe ochraceous, blackly punctate, the lateral angular areas black or castaneous, scutellum black, with two small medial spots and the apex ochraceous, in some specimens the two medial spots are obsolete; corium pale ochraceous, brownly punctate, lateral margin im-

punctate, a broad irregular transverse fascia near inner angle, apical angle and apical margin (narrowly) black; between the black fascia and apical margin the colour is pale luteous and has a macular appearance, membrane fuscous, with some pale apical spots; posterior angles of the metasternum, two lateral abdominal spots to abdomen, antennæ and legs luteous; apices of the three basal joints of antennæ, the fourth joint, basal and apical joints of rostrum, anterior femora (excluding base) and about apical thirds of intermediate and posterior femora black or castaneous

Length 8 to 10 millim.

Hab. Kashmir (vide Horvath); Bombay (Leith); Bor Ghat (Dixon) Ceylon (Templeton & Green).—Bushire (Cummings).

b. Pronotum not so long as broad.

816. Dieuches femoralis, Dohrn, Stett ent Zeit xxi, p. 405 (1880). Rhyparochromus anticus, Walk Cat Het v, p. 100 (1872) Rhyparochronus siamicus, Walk. Cat Het v, p 102 (1872). Dieuches alternatus, Horv Teimész, Füzetek, 1889, p 36

Allied to the preceding species but differing by the narrower head, the basal joint, apices of second and third joints and fourth joint (excluding base) of antennæ piceous; pronotum not so long as broad, narrowed anteriorly, apices of lateral margins rounded, posterior lobe with a small central linear pale ochraceous spot macular space between the transverse fascia and apical margin of corium subtriangular.

Length 9 to 10 milhm. Hab. Kashmır (fide Horvath). Sikhım (Atkınson) Assam, Margherita (Doherty); Nága Hills (Chennell). Ceylon (Green & Lewis). Burma, Falon, Bhamo (Fea) Tenasserum; Malewoon (Fea).-Batchian (Brit Mus.)

817. Dieuches punctipes, Dohrn, Stett ent Zeit. xxi, p 405 (1860), Dist A M N H (7) vin, p. 504 (1901). Rhyparochromus testacerpes, Walk Cat Het v, p. 101 (1872).

Alhed to the preceding species (D. femeralis, Dohrn) by the shape of the pronotum, but the colour of the antenne and legs uniformly pale ochraceous, apices of the femora generally very palely or more darkly influscated; extreme apiess of the three basal joints and apical half of fourth joint of antenne fuscous.

Length 8 to 8½ millim. Hab Ceylon (Green)

818. Dieuches uniformis, sp n

Head, pronotum, scutellum, membrane and body beneath black; corium dark castaneous; two small transverse linear spots near anterior margin of pronotum, lateral margins of pronotum and corrum, two small obscure central basal margmal spots to

pronotum, two discal spots and apex to scutellum, two small spots on apical margin and a similar spot near inner angle of corium, a linear spot near base of clavus, legs, antennæ and rostrum luteous; apices of first, second, and third joints and apical half of fourth joint of antennæ, apex of rostrum; apices of femora and extreme apices of tibiæ piceous; lateral margin of pronotum nearly straight, not sinuate.

Length 9 millim.

Hab Ceylon; Yatıyantota (Green)

819. Dieuches pallidulus, sp n

Head, pronotum, scutellum and body beneath very pale castaneous, legs, antennæ and rostrum ochraceous; corium luteous; clavus, a large transverse spot near inner angle and the apical angle very pale castaneous, lateral margins of pronotum, lateral margins of abdomen (excluding apical segment), and posterior angles of metasternum luteous; membrane dull ochraceous, basal joint of rostrum very pale castaneous. Head large and robust; pronotum deeply transversely constricted near middle, the lateral margins ampliately suberect, nearly straight, posterior lobe with a distinct central carination; scutellum moderately foveate on basal area, with a central carination, bifurcation from about centre to basal angles.

Length 12 millim. Hab. Sind (Coll Dist.).

Doubtful Species.

Dieuches abbreviatus, Scott (Metocus), A. M. N. H. (4) xiv, p 434 (1874); Horv. Termész Fuzetek, III, p. 147 (1879)

This species, described from Japan, is also recorded by Lethierry & Severin (Cat. Gén. Hém. ii, p. 219, 1894) as from India. I have failed, however, to find any corroboration of this habitat. It is closely allied to *D. uniquitatus*, Thinb

Genus PŒANTIUS

Posantius, Stal, Hem. Afr ii, pp 154 & 163 (1865), id En Hem iv, p 159 (1874).

Type, P. nigropictus, Stäl, a South-African species.

Distribution Ethiopian and Oriental Regions.

Body moderately elongate; head deflected, immersed to eyes, a little longer than broad; rostrum reaching the intermediate coxæ; first joint of antennæ not reaching the apex of head; pronotum longer than broad, transversely constricted behind middle, lateral margins laminately carrinate, scutellum longer than broad; legs long, anterior femora incrassate, finely spined beneath; posterior tarsi with the basal joint nearly three times longer than the other two joints together.

820. Poantius festivus, Dist. A. M. N. H. (7) vin, p. 506 (1901).

Head, antennæ, pronotum, scutellum and anterior legs pale brownish castaneous; posterior lobe of pronotum a little paler,

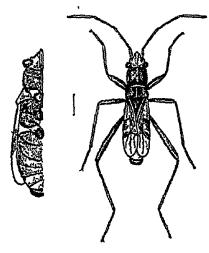


Fig. 65 -Paantius festivus.

coarsely brownly punctate, and divided from the anterior lobe by a transverse ochraceous line; on both lobes are indications of a central pale longitudinal line; comum ochraceous, punctate; the clavus, subclaval margm, and apical third pale brownish castaneous, m the last is a small subapical marginal pale spot; membrane pale greyish, its inner angle brown: body beneath, intermediate and posterior legs piceous, bases of intermediate and posterior femora, extreme apical spot to abdomen, lateral

margins of meso- and metasterna, posterior margin of metasternum, and anterior coxal spot ochraceous, apical joint of antenna ochraceous, its apical half piceous.

Length 4 to 4½ millim.

Hab. Calcutta (Ind. Mus.). Ceylon (Green).

Genus NAUDARENSIA, nov.

Type, N. pedata, Dist. Distribution. Assam.

Allied to Pacantus, but with the pronotum not longer than broad, and transversely constructed about middle, head less deflected; rostrum reaching the intermediate coxe, first joint of antenne not reaching apex of head; legs long, anterior femora incrassate and armed with a strong spine beneath near apex; posterior tarsi with the basal joint about twice as long as the other two joints together; membrane not reaching the abdominal apex

821. Naudarensia pedata, sp n

Head, anterior lobe of pronotum, scutellum, body beneath and legs black; posterior pronotal lobe ochraceous, thickly brownly punctate, lateral margins luteous; corium ochraceous, clavus and

87

subclaval area brownly punctate, lateral margin impunctate, sublateral area coarsely punctate, apical margin and inner angular

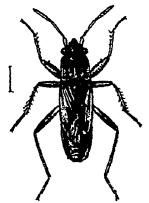


Fig. 66 -Naudarensia pedata.

area fuscous, the last with a distinct elongate fuscous spot; lateral margins of sternum and posterior margin of metasternum luteous; coxæ, bases of femora, bases of anterior tibiæ and extreme apex of anterior femora ochraceous; antennæ ochraceous, basal and apical joints infuscated; head and anterior lobe of pronotum glabrous; posterior lobe coarsely punctate; corium sparingly punctate; membrane not reaching apex of penultimate abdominal segment.

Length 5½ millim.

Hab. Assam; Shillong (De La Touche).

Genus LETHÆUS.

Lethæus, Dall Last Hem. ii, pp 532 & 557 (1852), Fieber, Eur. Hem pp 50 & 193 (1861), Sidl, Ofv Vet.-Al. Forh 1872, no. 7, p. 59, id En Hem iv, p 164 (1874). Coptoneurus, Puton, Ann. Soc. Ent. Fr 1869, p. 141. Mimicus, Dougl. & Scott, Ent Month Mag v, p 65 (1868)

Type, L. africanus, Dall., a West-African species.

Distribution. Palearctic, Ethiopian, Oriental, and Neotropical

Regions

Head rather small, triangular: antennæ rather more than half the length of body, first joint nearly as long as the head, second joint longest, rostrum reaching the posterior coxæ, basal joint a little shorter than the head; pronotium trapezoidal; scutellum rather large, membrane with four veins, of which the two inner are distorted near the base so as to touch the inner margin, the second and third and the third and fourth united near the middle by a transverse vein, forming two basal cells; anterior femora unarmed; tarsi three-jointed, basal joint as long as the other two joints together

A. Margins of pronotum unicolorous.

822. Lethæus assamensis, Dist A. M N. H. (7) vin, p 507 (1901).

Dark chocolate-brown; head black; a spot near each anterior angle of the pronotum, two small spots in clavus (one about centre and the other near apex), and two small central spots to cornum (one on central disk and the other at apical margin) ochraceous; antennæ fuscous, apical half of third joint ochraceous, fourth joint

mutilated in specimen described; membrane pale brownish. body

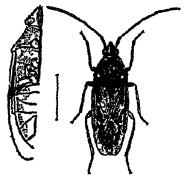


Fig 67.—Lethaus assamensis

beneath and legs very dark castaneous; rostrum and tarsi brownish - ochraceous. Head opsque, impunctate; pronotum thickly punctate, with two transverse impressions (one angulated near anterior margin, the other straight at about one-third from apex), scutellum thickly punctate; corium more sparingly punctate, its lateral margin for more than half from base brownish-ochraceous and levigate.

Length 11 millim.

Hab. Assam; Nága Hills (Doherty).

823. Lethæus indicus, Dall. List Hem ii, p. 558 (1852).

Head, pronotum and scutellum black, corium and body beneath dark castaneous; corium with a small luteous spot a little beyond the middle of the claval margin, a similar spot near centre of apical margin; membrane pale fuliginous, femora castaneous, tibiæ brownish-ochraceous; tarsi luteous; antennæ dull ochraceous; pronotum, excluding anterior disk, coarsely punctate; sternum thickly but less coarsely punctate; rostrum ochraceous, basal joint castaneous, extreme apex piceous.

Length 8 millim

Hab. North Bengal (Campbell, Brit. Mus.). Burma; Rangoon,

Palon (Fea).

Apparently a variable species, in some specimens there are two pale spots on the clavus; in others the antennæ are pale castaneous.

B. Margins of pronotum narrowly ochraceous.

s. Corrum without distinct subapical macular patch.

824. Lethæus extremus, Walk (Rhyparochromus) Cat Het v, p 99 (1872), Dist. A M N. H (7) viu, p 506 (1901).
Rhyparochromus greem, Kirby, J. Lunn Soc., Zool xxiv, p 100 (1891).

Head, pronotum and scutellum piceous, anterior lobe of pronotum more or less obscurely castaneous and very coarsely punctate, lateral and anterior margins of pronotum narrowly obscure ochraceous; corium castaneous, coarsely punctate, lateral and apical margins and some parts of the venation ochraceous; scutellum distinctly but somewhat sparingly punctate; membrane pale fuliginous body beneath and legs castaneous, tibiæ and tarsi

Gonatas 89

ochraceous; antennæ piceous, base of second joint castaneous, nearly apical half of third joint creamy-white.

Length 8 to 9 millim.

Hab. Ceylon (Green) - Walker's type was from Siam.

b. Corrum with distinct subapical pale macular patch.

825. Lethæus descriptus, Walk (Rhyparochromus) Cat Het. v, p 103 (1872) Rhyparochromus alienus, Walk tom cit. p 105

Lethæus signatus, Dist A M N H. (7) vin, p 506 (1901)

Head, pronotum, and scutellum piceous; pronotum with two small ochraceous spots on each side of posterior margin, and the lateral and anterior margins very narrowly ochraceous; colium ochraceous, punctured with brown, a spot near base, a large median patch, and the apex piceous, between the median patch and apex is enclosed a pale luteous irregular macular space, clavus with two small ochraceous spots on each side; antennæ fuscous, base of first joint and sometimes the whole of second joint pale castaneous or ochraceous, apex of third joint pale luteous, membrane greyish brown with the veins darker body beneath black, legs dark castaneous, lateral margins of sternum, anterior margin of mesosternum, tibiæ, tarsi and rostrum ochraceous; apex of rostrum piceous.

Length 9 millim

Hab. Nága Hills (Doherty) Ceylon, Kandy, Yatiyantota (Green). Tenasserim; Myitta (Doherty).—North Borneo (Brit Mus.)

A somewhat variable species in the ochraceous markings.

Genus GONATAS.

Gonatas, Dist. Biol. Centr -Amer., Rhynch 1, p 219 (1882)

Type, G. typicus, Dist, from Central America Distribution Neotropical and Oriental Regions.

Head rather longer than broad and, including outer margins of eyes, a little narrower than anterior margin of pronotum; antennæ with the three basal joints more or less hirsute, first joint passing apex of head, second longest, pronotum broader than long, anterior margin narrower than basal, the lateral margins moderately amphated, anterior angles rounded and with an obscure central transverse impression, posterior margin more or less concave at base of scutellum; scutellum triangular, a little longer than broad, anterior femora moderately thickened, with a few small spines beneath near apex; intermediate and posterior tibize setose; rostrum reaching intermediate coxe, first joint reaching base of head.

826. Gonatas clypeatus, sp. n.

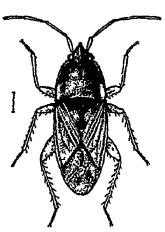


Fig. 68 .- Gonatas clypeat

Head, pronotom and scutellum piceous or dark castaneous; posterior area of pronotum much paler in hue; an elongate marginal spot at lateral pronotal angles, two spots a little beyond middle of scutellum and its apex ochraceous, corium luteous, membrane subhyaline: body beneath piceous; legs and rostrum ochraceous. antennæ brownish - ochraceous, the basal joint palest; scutellum with a very distinct carination on posterior half, which is bifurcate on disk; posterior lobe of pronotum and the scutellum thickly and coarsely punctate, corrum more sparingly punctate.

Length 4 to 5 millim.

Hab. Burma; Karennee, Schwego Myo (Fea).

827. Gonatas majusculus, sp n.

Head, anterior area of pronotum, scutellum, body beneath, and legs black; nearly posterior two-thirds of pronotum, tarsi, and apex of scutellum ochraceous; corium, antennæ and tibiæ castaneous; antennæ with the first and second joints black, the third and fourth castaneous, the three basal joints hirsute, fourth joint pilose, the ochraceous area of pronotum and corum coarsely punctate, scutellum more finely punctate; membrane pale fuliginous, not reaching the apex of abdomen, cornum with the spical margin broadly piceous; scutellum with the lateral margins somewhat distinctly prominent; tibiæ setose.

Length 61 millim.

Hab. Tenasserim (Coll Dist.).

In spite of the character of all the ribin being setose, I have placed this large species in the genus Gonatas, with which it agrees in most of the other structural details.

Genus ABDOLOMINUS, nov.

Type, A. picinus, Dist.

Distribution. Oriental Region.

Allied to Gonatas, but with the second joint of antennæ almost subequal in length to third, base of pronotum straight, not concavely sinuate, scutellum not longer than broad.

828. Abdolominus picinus, sp. n

Head, rostrum, pronotum, scutellum and body beneath piceous, shining, corium and legs castaneous; antennæ ochraceous, the apical joint a little infuscated, membrane pale subhyaline, with a piceous spot on each side near base; antennæ with the second, third, and fourth joints almost subequal in length, pronotum

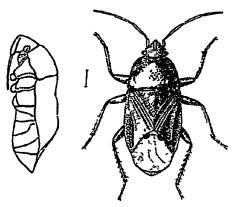


Fig 69 -Abdolominus picinus

punctate, more distinctly so on basal area, scutellum punctate, with an obscure central carmation; cornum thickly and distinctly punctate; intermediate and posterior tibiæ longly setose.

Length 4 millim.

Hab. Burma, Karennee (Fea)

829 Abdolominus ıntaminatus, sp n

Head, pronotum, scutellum and body beneath black, shining; antennæ, margins of posterior angles of pronotum, corium and legs ochraceous; membrane subhyaline, inspotted, femora (excluding apices) pale castaneous; clavus with a small linear impunctate line near apex, membrane passing abdominal apex; corium punctate, with a castaneous patch at the inner area, other characters as in A. picinus.

Length 31 millim.

Hab. Burma; Karen Hills

Genus DRYMUS.

Drymus, Fieber, Eur. Hem pp. 46 & 178 (1881); Stâl, Öfv. Vet.-Ak Forh. 1872, no. 7, p. 60, Saund. Hem. Het Brit. Islde. p. 114 (1892).

L'ampronotus, Dougl. & Scott, Ent. Month Mag iv, p 248 (1868). Lamproplax (part), Dougl. & Scott, tom. cst. p 265. Drymocoris, Jakowi. Troudy Ent. Ross. 1x, p. 225 (1878).

Type, D. pilipes, Fieb., a Palæarctic species. Distribution. Palæarctic and Oriental Regions.

Body broad, oval, or oblong; head with the eyes touching or not quite touching the pronotum, rostrum reaching the intermediate coxæ; autennæ with the apical joint shorter than second; pronotum with the lateral margins slightly sinuate, narrowly reflexed, basal margin moderately sinuate; scutellum foveately impressed; membrane usually fully developed; anterior femora finely spined beneath.

830. Drymus bicolor, Dist. A. M. N. H (7) viii, p 508 (1901).

Black, corium ochraceous, thickly brownly punctate, membrane



pale hyaline: head, pronotum and scatellum coarsely punctate; pronotum strongly sinuate at the apices of the transverse impression, lateral margins of the anterior lobe convex, posterior lateral angles slightly nodulose and a little paler in hue; corium coarsely punctate, the lateral margins levigate, the apical angles and a suffusion near inner angle fuscous.

Fig 70 - Drymus bicolor

Length 3½ millim.

Hab. Sikhim, Mungphu (Aikinson Coll, Brit, Mus.)

Genus SCOLOPOSTETHUS.

Scolopostethus, Fieber (part.), Eur. Hem. pp 49 & 188 (1861); Stål, Ofv Vet-Al. Fork 1872, no 7, p 60; Saund Hem. Het Brit. Islds p 108 (1892), Horv. Rev. d'Ent zi, p 253 (1892)? Tritomacera, Costa, Ann Soc Ent Fr. 1841, p 296

Type, S cognatus, Fieb, a Palæarctic species.

Distribution. Palæarctic, Oriental, Australasian, and Nearctic

Regions.
Head with eyes not quite touching the pronotum, triangular, anteriorly acuminate, first joint of antennæ considerably passing apex of head, rostrum reaching the intermediate coxæ, pronotum usually trapezoidal, but according to Saunders sometimes nearly square, "this character varying with the development of the wings," square, in this character varying with the development of the wings, lateral margins sinuate, laminate, anterior femora incrassate, with a single long spine and a series of smaller ones between it and the apex.

831. Scolopostethus ornandus, sp n.

Head, anterior lobe of pronotum, and scutellum black; posterior



Fig. 71 — Scolopostethus ornandus.

pronotal lobe castaneous punctured with black, enclosing a central and two oblique lateral paler spots, a spot on lateral margin near transverse impression luteous; corium luteous; apex of clavus and an adjoining subclaval fascia piceous, a narrow transverse central fascia and the apical area broadly black; membrane greyish much suffused with piceous: body beneath black; antennæ and legs castaneous; second, third and fourth joints of antennæ subequal in length. Anterior lobe of pronotum a little longer than posterior lobe, transverse impression very distinct; scutellum tumid, foveate at base

Length 4 millim
Hab. Burma, Karennee (Fea)

Genus GONSALVUS, nov.

Type, G. typus, Dist. Distribution. Burma

Body elongate, gradually narrowing from base of pronotum to apex of head; head acuminate, about half the length of pronotum, moderately tumid, first joint of antennæ about reaching apex of head, second, third, and fourth joints subequal in length, rostrum long, reaching the posterior coxæ, first joint extending to base of head; pronotum obscurely transversely constricted, the anterior lobe much longer than the posterior, anterior lobe somewhat tumid, glabrous, posterior lobe punctate, lateral margins oblique, slightly sinuaté near base, posterior margin concave; scutellum large, triangular, apex acute, corium a little longer than membrane, which has the veins longitudinal, not reticulate, anterior femora incrassate, the anterior tibiæ ampliated at apices and distinctly notched; membrane slightly passing abdominal apex



Fig 72 — Gonsalvustypus

Length 7 millim. Hab. Burma; Mandalay (Fea).

832. Gonsalvus typus, sp n

Head, antennæ, pronotum, and scutellum piceous; rostrum, apex of head, first joint and base of second joint of antennæ, and corium ochraceous, the last somewhat thickly punctured with brown; membrane brownish, the veins much paler: body beneath dark castaneous, lateral margins of sternum, posterior angles of pro- and metasterna, and legs ochraceous; punctures of corium arranged in longitudinal series; basal area of pronotum sparingly punctate.

Family PYRRHOCORIDÆ

The Pyrrhocoridæ, by some writers included in the Lygæidæ, can be at once distinguished from that family by the absence of ocelli. They are also, as a rule, much larger and more robust insects, while the structure of the head renders them easy to identify. They are generally of bright colours, red and black being the predominant tints

The Pyrrhocoride are a much smaller family than the Lygeide, and from their larger size and conspicuous appearance are much better known to entomologists, consequently we may presume that our knowledge of them is already of a very representative

character.

Stål (Hem. Afr. 111, p. 1, 1865) has divided the Pyrrhocoridæ into two subfamilies

Synopsis of Subfamilies.

Subfamily I. LARGINÆ.

A small subfamily which finds its headquarters in the Neotropical Region; the genera found in the Old World are not numerous, and they are best represented in the Oriental Region; the Ethiopian representatives are very few.

Synopsis of Genera.

A Antennæ very long in male, first joint about twice as long as head and pronotum together

Lohita, p. 94

B Antennæ normal in both sexes, first joint longer than head, but shorter than head and pronotum together

a Pronotum with anterior disk convex, the convexity not reaching anterior margin; lateral margins strongly reflexed.

IPHITA, p. 96

b. Pronotum with anterior convex area reaching anterior margin; lateral margins not strongly reflexed

PHYSOPELTA, p. 97

Genus LOHITA.

Lohita, Amy & Serv. Hem. p. 266 (1843), Still, En Hem. 1, p. 91 (1870).

Macrocercea, Spin Es Hem p 177 (1840), Kirk & Edw Wien.
ent Zeit. xxi, p 165 (1902)

Type, L. grands, Gray.

LOHITA. 95

Distribution. Oriental Region.

Body elongate, in the male with the abdomen abnormally prolonged to about twice its usual length, in the female normal; antenna in the male exceedingly long, first joint about twice as long as head and pronotum together, in the female a little longer than head and pronotum together, corium broader than abdomen, its apical angle longly narrowly produced, legs long, anterior femora moderately thickened, very finely serrate beneath and distinctly spined towards apex.

833. Lohita grandis, Gray (Lygæus), in Griff An. King xv," Ins 11, p. 242, pl. 92, f. 3 (1832), Brullé (Astemma), Hist des Ins 1x, p 383 (1836), Guer (Macroceraia) Ic Règne Anim, Ins p 346, pl lv1, f 3 (1838), Amy & Serv Hém p 266 (1843) Macrocercea longicornis Spin Ess p 177 (1840) Var longissima, Stäl, En. Hem 1, p 98 (1870) Var. sumatrana, Dist Ent. Month Mag xix, p 158 (1882)

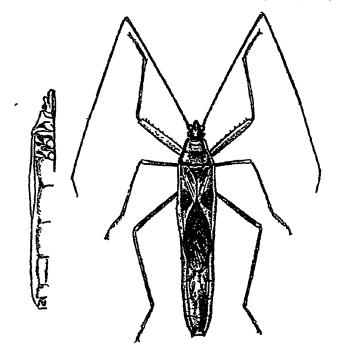


Fig 73-Lohita grandis, &

Sanguneous; antennæ (excluding base of first joint), disk of posterior lobe of pronotum (sometimes obsolete), scutellum (excluding base and apex), a central elongate spot to clavus (sometimes obsolete), a large somewhat rounded spot, variable in size, near inner angle of corium, membrane, lateral sternal spots, rather obscure spots near lateral margins of abdominal incisures,

and the legs black; anterior femora, bases and apices of intermediate and posterior femora sanguineous

Length, 5 40 to 54, 2 28 to 33 millim.

Hab. Assam; North Khási Hılls (Chennell) Calcutta. Upper Tenasserım (Limboig) — Sumatra Sumatran specimens almost constitute a distinct local race I have not yet received a specimen from Ceylon

Said to attack cotton-plants (Gossypum herbaceum) (of Atkinson,

Ind Mus Notes, 1, p 125, & 11, p 166)

Genus IPHITA.

Iphita, Stal, En Hem. i, pp 91 & 99 (1870)

Type, I. limbata, Stäl.

Distribution Oriental Region.

First joint of antennæ in both sexes longer than head, but shorter than head and pronotum together, pronotum with the disk of the anterior area convex, the convexity, however, well separated from the anterior margin, anterior margin a little concavely sinuate, lateral margins reflexed; anterior femora strongly spined beneath towards apices. Body oblong, head soi ewhat large, equilateral, convex; rostrum reaching the posterior coxæ first joint slightly shorter than head (not "articulo primo capite nonnihil longiore," as described by Stål), fourth joint shorter than third

A Second joint of antennæ a little longer than the first

834 Iphita limbata, Stål, En Hem 1, p 99 (1870), Bredd (Physopelta) Stett ent Zeit 1901, p 138

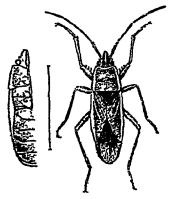


Fig 74 —Iphita limbata

Piceous or brownish-piceous, lateral margins of pronotum and corium and base of apical joint of antennæ pale luteous, apices of femora, bases of tibiæ, coxæ, and trochanters dull reddish; lateral margins of prosternim, posterior lateral margin of metasternum, and abdominal lateral margins luteous. Second joint of antennæ a little longer than the first

Var. The luteous marginal markings replaced by brownish Pronotum obscurely transversely

impressed near centre

Length 17 to 19 millim.

Hab Assam; North Khási Hills

Chennell). Hardwar (Wood-Mason) Calcutta (Ind Mus). Tenasserim, Houngdarau Valley (Fea), Tavoy (Ind Mus.). B Second joint of antennæ a little shorter than the first 835 Iphita grandis, sp n

Black; lateral margins of pronotum and corium, apex of scutellum, lateral margins of sternum and abdomen, anterior margin of prosterium, posterior margin of metasternum, coxæ, trochanters, and bases of femora reddish-ochraceous, fourth joint of antennæ greyish brown, its apical area luteous second joint of antennæ a little shorter than the first; pronotum transversely impressed a little before centre.

Length 25 millim

Hab Ceylon; Peradeniya (Green).

Genus PHYSOPELTA.

Physopelta, Amy. & Serv. Hém. p 271 (1843), Stål, Hem Afr. 111, p 2 (1865), id. En Hem i, pp. 91 & 99 (1870).

Type, P. albofasciata, de Geer, a Javan species.

Distribution. Ethiopian, Oriental, and Australian Regions; also received from China

Differing principally from the previous genus (*Iphita*) by the anterior convex area of the pronotum reaching the anterior margin, and the lateral pronotal margins being much less reflexed.

836. Physopelta gutta, Burm (Pyrrhocoris) Nov Act Acad Leop xvi, Suppl p 300, pl xli, f 10 (1834); id Handb 11, 1, p 285 (1835), Stål, Berl. ent Zeitschr. vii, p 391 (1863)
Physopelta bimaculata, Stål, Öfv Vet-Ak Forh 1855, p 186.

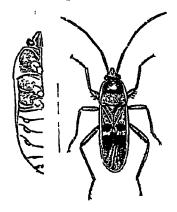


Fig 75 -Physopelta gutta

Dull reddish-ochraceous, antennæ, large basal spot to head, pronotum (excluding margins), scutellum, and basal area of corium fuscous; a discal rounded spot and apical angles of corium and the membrane black; rostrum, sternum, legs, abdominal incisures and thie e sublateral spots fuscous; lateral margins of the prosternum, base of first joint of antennæ, basal angle of membrane, coxæ, trochanters and femora beneath dull reddish-ochraceous: body pilose; base of apical joint of antennæ ochraceous.

Length 15 to 17 millim

Hab Assam, Margherita (Doher ty), North Khási Hills (Chennell) Ceylon (Green) Burma, Bhamo (Fea) Tenasserim, Myrtta (Doherty).—Also recorded from Japan (Lewis), W. Yunnan, and Sumatra.

837. Physopelta quadriguttata, Bergi Rev. d'Ent xiii, p 160 (1894)
Physopelta indra, Kii & Edw Wien. ent. Zeit. xxi. p. 165 (1902).

Oblong, ochraceous; anterior and lateral margins of pronotum, a median subelevated line to anterior lobe, shortly continued in posterior lobe, lateral margins of corium, prosterium, and abdomen, and apex of scutellum luteous, a rounded spot on disk of corium, and a smaller and more oblong spot near apical angle black, head, sternum, and membrane fuscous; abdomen on each side at bases of third, fourth, and fifth segments marked with a curved black spot; posterior lobe of pronotum, scutellum, and corium (excluding lateral margin) thickly and coarsely brownly punctate, antennæ black, first joint subequal in length to pronotum, fourth joint with a broad basal whitsh annulation; membrane slightly passing the abdominal apex. The legs are variable in coloration, either ochraceous, or with the femoral apices and tibue and tarsi fuscous, or wholly fuscous

Length 13 to 17 millim.

Hab. Sikhim (fide Bergroth). Naga Hills (Doherty). Malabar Mahé (Duchaussoy).

838. Physopelta cincticollis, Stål, Berl ent. Zeitschr. vu, p 392 (1863).

Oblong, fuscous-piceous; margins of pronotum, lateral margins of prosternum and abdomen, and corium ochraceous, the last with a spot near centre and the apical angle black, clavus and basal area of corium infuscated, basal halt of last joint of antenna strammeous; membrane fuscous, its base paler, apical margins whitish; head with eyes a little broader than long, antenna with the first joint slightly shorter than the second; pronotum transverse, posteriorly halt as broad again as anteriorly, behind middle distinctly punctate, corium distinctly punctate; anterior femora armed with two spins i near apex.

Length, \mathcal{Q} , 12 millim. Hab. "India orientalis" (Stâl). I have not seen this species.

839. Physopelta apicalis, Wall. Cat Het vi, p. 21 (1873)

Dull sanguineous, head, antennæ, pronotum (excluding lateral and posterior margins), scutellium, base of outer lateral margin of clavus, body beneath and legs piceous, antenniferous tubercles, base and apex of first joint of antennæ, head beneath, rostrum, coxæ, trochanters, bases and apices of femora, bases of tibiæ, anterior margin of prosternum, lateral margins of sternum and abdomen dull sanguineous; a transverse fascia to corium near inner angle and the membrane black; first joint of antennæ a little longer than second, third shorter than second but a little longer than fourth, lateral margins of pronotum somewhat

ampliately recurved, narrowly but distinctly transversely impressed near middle.

Length 19 to 20, breadth between pronot. angl. 6 millim. Hab. "Hindostan" (Brit. Mus.) Bor Ghát (Dixon).

840. Physopelta schlanbuschi, Fabr (Cimex) Mant Ins. ii, p 299 (1787), id (Lygeus) Ent. Syst iv, p 155 (1794), Stål, Hem Fabr i, p 80 (1868)
Pyrrhocoris schlangenbuschii, Burm Handb ii, 1, p 286 (1835)
Stoll, Fun f 273

Sanguneous; antennæ, two spots on anterior lobe of pronotum (sometimes obsolete), two large transverse spots near anterior margin of posterior lobe, scutellum, a rounded discal spot to corium, membrane, a lateral series of long transverse linear spots on sternal and abdominal incisures, apex of rostrum, tibiæ and tarsi black; base of first joint of antennæ and apex of scutellum sanguneous; antennæ pilose, apical joint greyish, first and second joints almost subequal in length, or second a little longer; posterior area of pronotum sparingly but very coarsely punctate; clavus somewhat coarsely, corium much more finely punctate.

Length 13 to 16 millim.

Hab Assam; Noa-Dehing Valley (Chennell). Burma, Bhamo, Karennee (Fea). Tenasserim, Meetan (Fea)—China

This species is said to affect the rice crop (cf. Atkinson, Ind. Mus. Notes, 1, pp. 125-6, and ii, p. 166)

Subfamily II. PYRRHOCORINÆ.

The Pyrrhocorine, as already pointed out, are distinguished from the Largine by having the sixth ventral segment entire and not cleft in both sexes, and contain a large majority of the genera of the whole family. The distribution of this subfamily is almost universal, but whereas the Largine are principally found in the Neotropical Region, the Pyrrochorine are very largely Oriental and Ethiopian in distribution

Synopsis of Genera.

- A. Hemelytra complete, membrane fully developed
 - a Apical angle of corum more or less rounded, not elongately acute

 a. Head transversely constructed or impressed beneath near base

b Head not transversely constricted or impressed beneath.

a'. Anterior area of pronotum completely circumscribed by continuous impression or punctures ANTILOCHUS, p 100.

a² Head with eyes broader than anterior margin of pronotum, eyes pedunculate

b² Head with eyes not broader than anterior margin of pronotum, eyes not pedanculate

 Anterior area of pronotum not or incompletely circumscribed by continuous impression or punctures

a² Incisures of third and fourth ventral segmentsmoderately laterally curved a³ Lateral margins of pronotum acute,

seldom reflexed.

a⁴. Eyes not touching anterior margin of pronotum
 b⁴. Head immersed to eyes

b³ Lateral margins of pronotum strongly reflexed .

b² Incisures of ventral segments straight, not distinctly curved ...

b Apical angle of comunical elongately acute
 B Hemely traincomplete, membrane absent or seldom fully developed.

a Head with eyes wider than anterior margin of pronotum

b Head with eyes not wider than anterior margin of pronotum

a. Apical margin of corum truncate
 a' First joint of rostrum as long as head

b' First joint of rostrum as long as nead than head

b Apical margin of cornum rounded

Естаторя, р 102.

Euscopus, p. 105.

[p. 107. Melamphaus, Odontopus, p 108

DINDYMUS, p. 110 [p 115. PYRRHOPEPLUS, DYSDFRCUS, p 118

Countesius, p 114.

DERMATINUS, p 115.

SCANTIUS, p 117. PYRRHOCORIS, [p 116.

Genus ANTILOCHUS

Antilochus, Stål, Berl ent. r Zeutschr vn. p 393 (1863), id Hem Afr m, p 4 (1865), i En Hem 1, p 103 (1870) Newretus, Reut Ent Tidskr vn., p 92 (1887)

Type, A. coqueberti, Fabr.

Distribution Ethiopian (including Madagascar) and Oriental Regions, and extending throughout the Malay Archipelago to New Guinea.

Head longer than broad between eyes, transversely constricted or impressed beneath near base, somewhat deflected, and immersed to eyes, which are prominent and sessile; antennæ of moderate length; rostrum short, the two apical joints almost equal to, or a little shorter than, the first joint, lateral margins of the pronotum moderately laminate, but rarely distinctly reflexed; anal segment in the female large and posteriorly lounded, legs normal, femora moderately thickened, posterior tarsi with the basal joint much longer than the two apical joints together.

A. Lateral margins of the pronotum not distinctly reflexed.

841. Antilochus russus, Stål, Berl ent Zeitschr. vii, p 394 (1863).

Sanguineous; membrane pale brownish-ochraceous; antennæ,

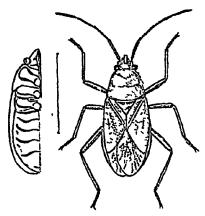


Fig. 76 -Antilochus russus

eyes, two transverse series of punctures to pronotum, the hrst strongly angulated, a transverse series of punctures near base of scutellum, sternal and ventral incisures, and a rounded spot near base of membrane black, apices of tibie and the tarsi fuscous, pronotum twice as broad at base as at apex, obscurely punctate, excepting the discal area between the black punctures, corium thickly punctate; anterior femora spined beneath near apices

Length 17 to 19 millim Hab. Sikhim. Bhutan.

Assam; Margherita (Doherty), North Khásı Hılls (Chennell). Tavoy

842. Antilochus coqueberti, Fabr (Lygreus) Syst Rhyng p 222 (1803), Burm (Pyrrhocoris) Handb u, 1, p 284 (1835), Blanch. (Astemma) Hist des Ins p 128 (1840), Stal (Odontopus), Öfv Vet-Ak Forh 1855, p 390, id Hem Fabr i, p 81 (1868) Cimex augur, var a, Thunb Nov Ins Sp 111, p 58 (1784), excl syn.

Sanguineous; antennæ, eyes, membrane, and sternal and ventral incisures black; base of first joint of antennæ sanguineous; interior angle and apical margin of membrane pale brownish-ochraceous, apices of tibiæ and the tarsi fuscous, pronotum with the posterior margin twice as broad as anterior margin, sparingly obscurely punctate, excepting anterior discal area which is margined with black punctures, corrum thickly punctate, anterior femora shortly spined beneath near apex

Length 14 to 16 millim

Hab Kashmir (Hugel) Assam; North Khási Hills (Chennell), Nága Hills (Doherty) Calcutta. Secunderabad. Ceylon; Colombo (Green). Andaman Islands; Port. Blair (Meldola) Burma, Minhla (Comotto), Bhamo (Fea) Tenasserim, Meetan, Mt. Mooleyit (Fea).

B Lateral margins of the pronotum distinctly reflexed.

843. Antilochus nigripes, Burm (Pyrrhocoris) Handb ii, 1, p 284 (1835); Stäl, Berl. ent Zeitschr. vii, p 394 (1863) Physopelta rubricosus, Stäl, Ofv Vet.-Ak Fork 1854, p 236

Sanguineous; antennæ, membrane, rostrum and legs black, base of fourth joint of antennæ, internal angle and apical margin of membrane pale ochraceous; pronotum punctate, excluding discal anterior area, the punctures surrounding which are concolorous: corium somewhat thickly punctate; lateral margins of pronotum distinctly reflexed

Length 15 to 16 millim.

Hab. Assam; Khási Hills (Chennell) Ceylon; Peradeniys (Green) Tenasserim; Thagata, Mt. Mooleyit (Fea).—Found in several islands of the Malay Archipelago; Sumatra (Forbes). Philippines (vide Stål). Also recorded from China.

844. Antilochus pygmæus, sp. n.

Sanguineous; antennæ, eyes, basal margin of scutellum, and membrane black, legs and rostrum fuscous, bases of femora and base of first joint of antennæ, inner angle and apical margin of membrane ochraceous, abdomen beneath somewhat suffused with piceous on apical area; head very acuminate anteriorly; pronotum with the lateral margins distinctly reflexed; pronotum and corium punctured as in preceding species (A. nigripes).

Length 10 millim.

Hab Ceylon; Kandy (Green)

845. Antilochus lineatipes, Si&l (Odontopus), Öfv. Vet-Ak. Förk. 1858, p 441, Dokra (Dysdercus), Stett. ent Zeit xxi, p 405 (1860)

Black, lateral margins of pronotum (widest posteriorly), corum, lateral margins of prosternum, posterior margin of metasternum, and abdomen beneath sanguineous; corium with the clavus and a large transverse spot near inner angle black; abdomen beneath with a large transverse elongate black spot on each lateral area of the incisures, fourth joint of antennæ obscurely ochraceous at base, pronotum with the lateral margins distinctly reflexed, posterior area only sparsely punctate

Var. The sangumeous coloration replaced by ochraceous.

Length 21 to 23 millim.

Hab. Trivandrum. Ceylon; Kandy (Green).

Genus ECTATOPS.

Ectatops, Amy. et Serv Hém. p. 278 (1843), Still, En. Hem. i, p 102 (1870).

Type, E. limbata, Amy. & Serv.
Distribution. Oriental Region; extending throughout the Malay
Archipelago to New Guinea.

103

Head with eyes broader than the anterior margin of the pronotum, eyes pedunculate, pronotum trapezoidal, the transverse impression nearest to the anterior margin, lateral margins distinctly reflexed, rostrum of variable length, basal joint about reaching apex of head: femora moderately thickened, anterior femora with some small spines beneath near apex; third and fourth abdominal incisures curved and not reaching lateral margins

ECTATOPS

A. Rostrum just passing intermediate covæ.

846. Ectatops gelanor, Kirk & Edw Wien cut Zeit אוא, p 167 (1902)

Piceous; apical half of fourth joint of antennæ, apex of

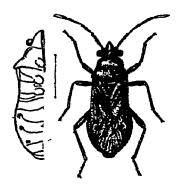


Fig 77 -Ectatops gelanor.

scutellum, a discal spot and apical angle to corium, rostrum, and a small spot near intermediate acetabula ochraceous; corium with a small black spot attached to the discal ochraceous spot, and a rounded black spot in the apical angular ochraceous area; a sublateral black spot on each of the last four abdominal segments, rostrum just passing the intermediate coxe, pronotum with the posterior area very coarsely punctate, the discal anterior area defined by a marginal series of very profound punctures; scutellum

(excluding basal area) and the corium thickly punctate.

Length $9\frac{1}{2}$ to 10 millim.

Hab. Burma; Karennee (Fea).

B. Rostrum reaching apex of second abdominal segment.

847. Ectatops indigna, Walk (Dindymus) Cat. Het. vi, p 10 (1873);

Dist A M N. H. (7) ix, p 36 (1902)

Ectatops largoides, Walk tom cit p 24 (1873)

Piceous, head, base of first joint of antennæ, margins of pronotum, extreme apex of scutellum, basal lateral margins of corium, lateral margins of head beneath, and lateral margins of prosternum sanguineous, abdomen luteous, segmental incisures piceous on lateral areas, connexivum reddish-ochraceous, internal area of membrane usually fuliginous, anterior discal area of pronotum marginally defined by black punctures, the anterior series angulate, posterior disk sparingly punctured, the punctures not reaching margins; corium thickly punctate; rostrum about reaching apex of second abdominal segment, anterior femora with two short prominent spines near apex.

Var. Corrum almost entirely red, basal angle and apical margin of the membrane ochraceous.

Length 11 to 14 millim.

Hab. Assam, Noa-Dehing Valley (Chennell). Burma, Karennee, Palon (Fea). Arakan (Brit. Mus) Tenasserim; Mt. Mooleyit (Fea). Tavoy.—Siam

848 Ectatops ophthalmica, Burm (Pyrrhocoris) Handb n, 1, p 284 (1835), Stat, Berl ent Zeitschi. vii, p. 397 (1863)

Sanguineous; pronotum, basal margin of scutellum, membrane, antenne, rostrum, sternum, basal abdominal segment and legs black; apical joint of antennæ ochraceous, its apex fuscous; basal angle and apical margin (both varying in width of membrane) dull obscure ochraceous, head beneath black, its margins sanguineous; anterior area of pronotum defined by a transverse series of coarse punctures, corium somewhat thickly and coarsely punctate, rostrum reaching apex of second abdominal segment

Variable in colour of membrane; either black with basal angle and apical margin ochraceous, or ochraceous with black discal spot.

Length 11 to 14 millim

Hab. Sylhet (Vienna Mus.) — Found in the Malny Peninsula and western islands of the Malayan Archipelago.

849. Ectatops rubiacea, Amy & Serv Hém p. 273 (1843). Stâl, Berl ent Zeitschi. vii, p 396 (1863); Dist. A. M. N. H. (7) ix, p 37 (1902)Dindymus imitator, Walk. Cat Het v1, p. 7 (1873)

Sanguineous, membrane ochraceous; abdomen beneath and connexivum luteous, antennæ (excluding base of first joint), punctures defining the anterior discal area of pronotum, basal margin of scutellum, a large apical or sometimes subapical spot to membrane, head beneath (excluding lateral margins), rostrum, sternum, and legs black, lateral margins of prosternum sanguineous; segmental incisures on lateral areas piceous; posterior area of pronotum somewhat sparingly punctate, cornun thickly punctate, rostrum reaching the apex of the second abdominal segment. Length 12 to 15 millim.

Hab Shillong Sibságar (Ind Mus.). Burma, Karennee (Fea) Tenasserim; Mt Mooleyit (Fea), Tavoy — Siam (Brit. Mus)— Common in the Malay Peninsula, and found in several islands of the Malayan Archipelago

850. Ectatops limbata, Amy et Serv Hém p 273 (1843), Stal, Berl ent Zeitschr vn, p 396 (1863), id En. Hem 1, p 105 (1870)

Black, head above and lateral margins of head beneath, anterior disk and lateral margins of pronotium, lateral and apical margins (the last very narrowly) of corrum, lateral margins of prosternum, and abdomen dull sanguineous; posterior area of pronotum and EUSCOPUS. 105

the corium thickly punctate, rostrum reaching the apex of the

second abdominal segment

Var According to Stal, this species varies by sometimes having the posterior lobe of the pronotum and the hemelytra more or less broadly margined with, or nearly totally, reddish.

Length 13 millim

Hab. India (fide Stal) - Java

Species unknown to the writer.

851 Ectatops distincta, de Tuillefi Ann Soc Ent Fr 1864, p 144

"Pronotum entirely red; head red above, scutellum black with the extreme apex red, membrane black, yellowish at internal basal area, body black beneath, laterally margined with red, abdomen exhibiting a reddish tint at about the middle of its disk." (de Vuillefroy)

Length 13 millim.

Hab. Sylhet.

I have seen a specimen from Sylhet, belonging to the Vienna Museum, which is apparently a variety of this species, having a piceous transverse fascia behind the anterior pronotal callosity

852 Ectatops lateralis, de Vuillefr Ann Soc Ent Fr 1864, p 144

"Lateral margins of the pronotum straight, its discal impression slightly approaching the anterior margin, head produced in triangular form. Entirely red above, corium margined with black on its posterior half, membrane black, antennæ and legs red, all the under surface of the body very pale, excepting the head beneath which is red, abdomen exhibiting on its disk a large triangular black spot which does not reach the base and of which the margins are irregular." (de Vuillefroy)

Length 11 to 13 millim.

Hab Sylhet

Genus EUSCOPUS.

Euscopus, Stall, In Hem 1, pp 102 & 106 (1870)

Type, E. rufipes, Stal

Distribution. Oriental Region.

Body oblong, beneath sericeous; head as long as broad, deflected from above, moderately convex, equal in width to the anterior margin of the pronotum; rostrum reaching or passing the intermediate cove, first joint not longer than the head; antenne short, first joint longest, second and fourth equal in length; pronotum transverse, lateral margins reflexed, transverse impression distinct and continuous corium with the apical margin nearly straight; legs normal, anterior femora moderately increasated, armed beneath near apices with two small spines; incisures to third and fourth ventral segments with their apices anteriorly curved.

853. Euscopus rufipes, Stål, En Hem 1, p 106 (1870). Pyrihocoris vittiventris, Walk Cat Het. v, p. 171 (1872). Æschines pyrrhocoroides, Kirk δ Edw Wien ent. Zeit. xxi, p 167, t. 111, ff. 7, 7 a (1902)

Black; margins of pronotum, broadest posteriorly, apex of

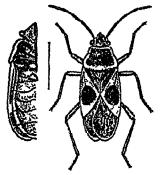


Fig 78 - Euscopus rufipes

scutellum, corrum, connexivum (above and beneath), lateral margins of prosternum and legs sanguineous, clavus (excluding sutural margins), a large rounded discal spot, and sometimes apical angle to corrum black, inner angle and apical margins of membrane pale fuliginous; fourth joint of antennæ strammeous, its apex fuscous. body beneath greyishly sericeous, a rounded black spot near basal lateral margins of third, fourth, and fifth segments; disk of pronotum, scutellum, and corrum thickly finely punctate, posterior marginal area of pronotum

sparingly and more coarsely punctate.

Var. In some specimens the ground-colour of the corium is ochiaceous, and in others the abdominal disk is sanguineous

Length 10 millim

Hab Sylhet (Vienna Mus). North Khási Hills (Chennell); Nága Hills (Doherty). Burma, Karennee (Fea) — Originally described from Java.

854. Euscopus indecorus, Walk (Pyrrhocoris) Cat Het v, p 172 (1872), Dist A M. N H. (7) ix, p. 37 (1902)

Piceous; lateral and posterior margins of pronotum, lateral margin and a small spot near apical margin of corium, lateral margins of prosternum, posterior margins of pro- and metasterna, lateral margins of abdomen, coxæ, trochanters and rostrum ochraceous or brownish-ochraceous; membrane dark fuliginous, its pical margin a little paler, fourth joint of antennæ fuscous, its base stramineous; last four segments of abdomen marked with a round black spot near lateral margins; transverse incisure to pronotum defined by a series of very coarse punctures; anterior temora with two distinct spines beneath near apex.

Length 7 to 10 millim.

Hab Assam, North Khasi and Naga Hills (Chennell). Coylon (Lewis) Burma; Teinzo, Bhamo (Fea).—Originally described from Siam.

855. Euscopus gestroi, sp n.

Piceous; basal joint of antennæ, lateral margins of pronotum and corium, connexivum, lateral margins of sternum and abdomen,

coxe, trochanters, and legs sanguineous, apical joint of antennæ (excluding base) greyish; basal area of head finely and obscurely granulate; posterior area of pronotum coarsely punctate and somewhat rugulose, second joint of antennæ slightly longer than first, third and fourth subequal in length.

Length 7 millim.

Hab. Burma; Palon (Fea).

Genus MELAMPHAUS.

Melamphaus, Stål, Hem. Fabr 1, p. 83 (1868); id. En Hem 1, p. 102 (1870).

Type, M. faber, Fabr.

Distribution Oriental Region.

Body very oblong, head with eyes about equal in width to anterior margin of pronotum, eyes not touching anterior pronotal margin, rostrum long, first joint extending beyond anterior margin of prosternum, antennæ long, first and second joints equal in length; eyes sessile; pronotum long, narrowed anteriorly, lateral margins acute, sometimes reflexed, transverse impression curved, not continuous; hemelytra passing the apex of the abdomen; incisures of the third and fourth ventral segments moderately laterally curved, legs long, anterior femora spined beneath near apices; first joint of the posterior tarsi much longer than the two apical joints together.

A. Laural margins of pronotum ucute, not reflexed.

856 Melamphaus faber, Fabr (Cimex) Mant Ins 11, p 297 (1787); id (Lygeus) Ent. Syst iv, p 146 (1794), Stâl, Hem Fabr. 1, p 83 (1868).

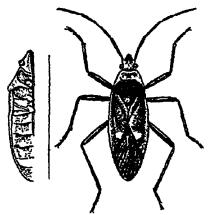


Fig 79 -Melamphaus faber

Sanguineous, antennæ, posterior area of pronotum, scutellum, corium, membrane, sternal sutures two small basal medial spots to second and third abdominal segments, four lateral segmental abdominal spots, rostrum and legs black, corium with an ochraceous spot near centre of apical margin; rostrum extending to near middle of abdomen

Var. a Head sanguineous. Var. b Spot to corium very large and sanguineous

Var. c Body above uni-

formly black; disk of abdomen beneath piceous.

Length 25 to 28 millim.

Hab Assam, North Khási Hills (Chennell), Nága Hills (Doherty); Sibságar (Peal). Darjeeling (Coll Dist.). Burma; Rangoon (Fea).—Also found in the Malay Peninsula and several islands of the Malayan Archipelago, common in the Philippines

857. Melamphaus fulvomarginatus, Dohrn (Dysdercus), Stett. ent Zeit. XXI, p 405 (1860), Dist A.M N H. (7) IX, p 37 (1902) Melamphaus lateralis, Walk Cat Het vi, p. 13 (1873) Melamphaus marginalis, Walk loc cit p 14.

Piceous; lateral margins of pronotum, lateral margins of corium (sometimes not extending beyond middle), lateral margins of prosternum, sternal incisures, odoriferous apertures, and body beneath dull sanguineous, abdominal incisures piceous; fourth joint of antennæ fuscous, its basal half luteous; rostrum about reaching the middle of abdomen.

Var. a Lateral and posterior margins of pronotum and lateral

margins of corrum luteous.

Length 20 to 24 millim.

Hab Trivandrum. Ceylon, Peradeniya, Kandy (Green).

B. Lateral margins of pronotum reflexed.

858 Melamphaus rubrocinctus, Still (Dysdercus), Berl ent Zeitschrvii, p 403 (1863), Dist A. M. N. H. (7) ix, p 37 (1902).

Melamphaus femoratus, Walk, Cat. Het vi, p 15 (1873)

Reddish-ochraceous, faintly sericeous; a small medial spot at base of head (frequently obsolete), antennæ, rostrum, pronotum, scutellum, corium, membrane, segmental incisures, tibæ and tarsi black or piceous, lateral and posterior margins of pronotum, lateral margins of corium (excluding apex), and two oblique fasciæ differing in direction, one before middle and the other near apex, reddish-ochraceous, sternum fuscous, its segmental margins, spots near coxæ, and anterior margin of pronotum dull ochraceous, lateral margins of prosternum reddish-ochraceous; apical margin of membrane pale fuliginous

Length 19 to 25 millim.

Hab Assam; Margheuta and Nága Hills (Doherty), Khási Hills (Chennell) Burma, Karennee (Fea).

Genus ODONTOPUS.

Odontopus, Lapor te, Ess Hém. p 37 (1832), Stål, En. Hem 1, p 102 (1870)

Type, O. sexpunctatus, Laporte, an Ethiopian species.

Distribution Ethiopian and Oriental Regions.

Elongately subovate, lateral margins of the pronotum not or slightly reflexed, pronotal transverse impressions not nearly continued to lateral margins; rostrum not or scarcely reaching posterior coxe, odoriferous apertures somewhat obsolete, their margins not or little callous, antennæ robust A. First and second joints of antennæ subequal in length.

859 Odontopus nigricornis, Stål, Stett ent Zeit xxii, p 146 (1861), id Beil ent Zeitsche. vii, p 393 (1863), Dist A M N H. (7) 12, p 38 (1902)

13, p 38 (1902) Physopelta plana, Walk Cat Het vi, p 21 (1873) Physopelta bimaculata, Walk loc cit p 22

Ochraceous, reddish-ochraceous, or sanguineous; antennæ,

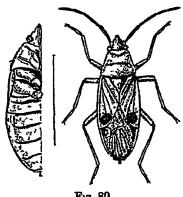


Fig 80
Odontopus nigricornis.

transverse impressions to pronotum, basal margin of scutellum, a round spot near apical angle of corium, and sternal and abdominal incisures black, first and second joints of antennæ subequal in length, third shortest, transverse impressions to pronotum not laterally united by punctures; anterior femora finely serrate beneath, and armed with one or two prominent spines.

Length 16 to 22 millim.

Hab. Bombay (Leith), Bor Ghát (Dixon) Burma; Mandalay, Teinzo (Fea). Tenasserim, Houngdarau valley (Fea).

Found on the flowers of Wedeha urticæfolia, DC., at Khandála m September (R. M. Dixon)

860. Odontopus scutellaris, Walk. Cat Het v, p 178 (1872),

Sanguneous; second joint of antennæ (excluding base), third and fourth joints, eyes, constrictions to pronotum, scutellum (excluding lateral margins and apex), two rounded spots to corium (one near inner angle, the other near apex), apical angle of corium, membrane, and the abdominal marginal incisures black, rostrum reaching the posterior coxæ; first joint of antennæ sparingly but longly pilose; first, second, and fourth joints subequal in length, third shortest; membrane not quite reaching apex of abdomen; tubæ and tarsi clothed with fine bristles.

Length 15; breadth between pronotal angles 4½ millim. Hab. North Bengal (Lieut. Campbell).

B. First joint of antennæ a little longer than second.

861. Odontopus varicornis, Fabr (Cimex) Mant Ins 11, p 298 (1787); id (Lygeus) Ent Syst 1v, p 151 (1794), Stäl, Hem Fabr i, p 81 (1868) Stoll, Pun. f 35

Above purplish-red, paler beneath; pronotal margins, lateral margins of corium (excluding apices), connexivum above and

beneath, and lateral margins of prosternum luteous; antenna, transverse impressions to pronotum, scutellium, clavus, membrane, and margins of sternal and abdominal segments black or piceous; antenna with the base of first joint reddish, fourth joint pale luteous, its apex fuscous, first joint a little longer than the second.

Var. a A spot at base of head and the ground-colour of body above and beneath piceous; margins of prosternum, posterior margin of metasternum, and abdominal segmental margins ochraceous; basal joint of antennæ sanguineous beneath, femoral bases piceous.

Length 17 to 23 millim. Hab. Ceylon (Green).

C. Second joint of antennæ a little longer than first.

862. Odontopus sanguinolens, Amy. & Serv. Hém. p 271 (1843).

Sanguineous; second and third joints of antenne, scutellum, clavus (sometimes only its inner area), membrane, and sternal and abdominal incisures black; fourth joint of antenne luteous, its apex fuscous, second joint a little longer than the first.

Length 17 to 19 millim.

Hab. Madras Trivandrum (Brit. Mus.). Pondichery (Vienna Mus.).

Genus DINDYMUS.

Dindymus, Stål, Öfv Vet.-Ak Fork. 1861, p. 196, ad En. Hem 1, p 108 (1870).

Type, D. bicolor, Herr.-Sch, a Javan species.

Distribution. Ethiopian, Oriental, and Australasian Regions.

Eyes sessile, head convex; the incisures of the third and fourth abdominal segments moderately curved laterally, odoraferous sulcations distinct, their margins callous, lateral pronotal margins strongly reflexed.

A. Pronotum and hemelytra broadly subovate.

863 Dindymus lanius, Stål, Berl. ent Zeitschr viì, p. 401 (1863). Dindymus thyoneus, Kirk & Edw Wien. ent Zeit xxi, p. 170, t iii, f 9 (1902).

Sanguineous; apex of second joint and the whole of third and fourth joints of antennæ, rostrum, excluding basal and base of second joints, basal margin of scutellum, a large discal spot to membrane, sternum, base of abdomen, and legs black; interal margins of prosternum sanguineous; sternal incisures and the membrane obscure ochraceous, anterior area of pronotum defined by coarse

black punctures, posterior pronotal area sparingly punctate; corium finely and thickly punctate.

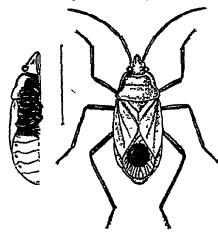


Fig 81 - Dindymus lanius.

Var. a. Disk of posterior area of pronotum ochraceous.

Var. b Membrane unicolorous, ochraceous, unspotted.

Var. c Antennæ wholly black, excepting base of first joint.

Var d Resembling var b, but with the abdomen beneath stramineous, its apex sanguineous

Var. c. Apices of the femora and bases of the tibiæ more or less sanguineous

Length 15 to 19; breadth

between pronotal angles 5 to 6½ millim.

Hab. Assam, Naga and Khási Hills (Chennell). Burma, Karennee (Fea) — Also received from West Yunuan (Dr. Anderson)

- B. Pronotum and hemelytra elongate, not prominently ampliated
 - a. Sternum with the posterior segmental margins creamy-white.

864 Dindymus rubiginosus, Fabr (Cimex) Mant Ins 11, p 301 (1787), Burm (Pyrrhocorus) Handb 11, 1, p 284 (1835), Still, Berl ent. Zentsch v11, p 399 (1863)

Dysdercus hypogastricus, Herr-Sch Wanz 1x, p 177, f. 979 (1853)

Var. geniculatus, Biedd Abh Ges Halle, xxiv, p. 82 (1901)

Reddish-ocliraceous or pale sanguineous; antenne, rostrum, basal angle and large central spot to membrane, sternum, basal area of abdomen, and the legs black; the posterior margins of the three sternal segments broadly creamy-white, base of first joint of antenne and basal joint of rostrum, excluding apex, pale sanguineous, basal margin of pronotum and the membrane pale dull ochraceous, the basal black area to the abdomen is variable in size; the abdomen beneath also varies in hue from pale sanguineous to stramineous, and in one specimen the abdominal incisures are black.

Length $10\frac{1}{2}$ to 16, breadth between pronotal angles 3 to 5 millim.

Hab Assaw; North Khási Hills (Chennell), Nága Hills (Buller), Margherita (Doherty), Sadiya Malabar Burma; Palon, Karennee, Malewoon (Fea). Tenasserim; Thagata (Fea).

865. Dindymus albicornis, Fabr (Lygæus) Syst Rhyng. p 228 (1803), Stål, Berl ent Zeutschr vn, p 399 (1863), id Hem Fabr 1, p 82 (1868).

Black, antennæ fuscous, fourth joint (excluding apex) stramineous, anterior margin and two spots on posterior disk of pronotum, spots near coxæ, posterior margins of sternal segments (that to mesosternum broken), and anterior margin of prosternum creamy-white, abdomen beneath and corium beyond middle pale sanguineous, membrane obscure hyaline

Antennæ with the first and second joints sometimes pale

brownish.

Length 9 to 13, breadth between pronotal angles 3 millim Hab Tenasserim, Thagata (Fea)—Java, Sumatra, Borneo, Philippines.

866. Dindymus ovalis, Stal, Berl ent Zeitschr vii, p 401 (1868).

Black, basal half of apical joint of antenne, pronotum excluding the anterior area, margins of prosternum, spets near c.vxe, posterior margins of meso- and metasterna, and abdomen beneath stramineous; corium obscure fuscous-red; membrane fuscous

Length 15 millim.

Hab "India orientalis" (Coll Signoret).

I have not seen this species

b. Posterior margin of metasternum creamy-white.

867. Dindymus sanguineus, Fabr (Lygeus) Ent Syst. 1v, p 155 (1794), Stâl, Hem Fabr 1, p. 82 (1868)
Cimex augur, var β, Thunb. Nov Ins Sp 111, p 58 (1784).
Dysdercus augur, Stâl, Ofv Vet -Al Forh 1855, p 391.
Lygeus cruentus, Fabr Syst Rhyng p 225 (1803)
Pyrrhocoris hematidens, Hahn, Wanz Ins. 1, p. 9, f 3 (1831)

This is a species closely allied to *D* miliginosus, and differing principally by the absence of the three pale fascine to the sternum, the posterior margin of the metasternum being alone stramineous, the variation is also on similar lines with that found in *D* miliginosus

Length 11 to 15, breadth between pronotal angles 3 to

5 millim.

Hab Assam, Nága Hills (Doherty), Harmatti, base of Dafla
Hills (Atkinson) Burma, Karennee—China, Hong Kong (Coll
Dist.).

868. Dindymus bicolor, Herr-Sch (Pyrrhocoris) Wanz vi, p 27, f 585 (1842), Stål, Berl. ent. Zeitschr. vii, p 398 (1863).
Cimex augur, var a, Thunb Nov. Ins. Sp 111, p 58, f 69 (1784)
Dysdercus thoracicus, Stål, Ófv Vet-Al Forh 1855, p 391
Dindymus azalaias, Kirk & Edw Wien. ent Zeit xxi, p 169, t. 111, f 8 (1902)

Head, antennæ, pronotum, scutellum and a small spot at base of membrane (sometimes almost obsolete) black; base of first joint of antennæ, apical area of head, and corium testaceous; membrane dull ochraceous, abdomen beneath sanguineous, sternum, discal basal area of abdomen, rostrum and legs black, posterior margin of metasternum creamy-white; rostrum passing posterior coxæ, first joint of antennæ much longer than second.

Var. a. Head and antennæ wholly black.

Length $9\frac{1}{2}$ to 15; breadth between pronotal angles 3 to 4 millim.

Hab. Burma (Gianetti).- Java.

869. Dindymus thunbergi, Stôl (Dysdercus), Öfv Vet-Al. Forh
1855, p 391, ul En Hem i, p 111 (1870)
Cimex augur, var γ, Thunb Nov Ins Sp. 111, p 58, f. 68 (1784)

Luteous or rufous; the whole of the third and apex of the fourth joint of antennæ, rostrum, anterior transverse callosity to pronotum, basal half of scutellum, sternum, base of abdomen, tibiæ and tarsi piceous, membrane obscure whitish, bipunctated with fuscous; rostrum half as long as body; apex of scutellum luteous, corium broadened at middle, densely, coarsely punctate; sternum violaceous black, posterior margin obscurely white: femora black, apices with tibiæ luteous, tarsi fuscous

Length 15; breadth 6 millim Hab. Coromandel Coast.

I have not seen this species.

c. Sternum without pale posterior segmental margins

870. Dindymus sita, Kirby, J. Linn Soc, Zool xxiv, p. 104 (1891)

Pale reddish-ochraceous; membrane dull ochraceous, antennæ, eyes, apex of rostrum, apices of femora, the tibiæ and tarsi, and a spot near basal angle of membrane black; basal half of apical joint of antennæ stramineous, disk of basal area of pronotum sparingly darkly punctate, scutellium and corium finely and more thickly punctate

Length 13 to 15; breadth between pronotal angles 41 to

mıllım ö

Hab. Ceylon (Green & Lewis).

VOL. II.

871. Dindymus cenæus, Dist A M N. H (7) ix, p. 40 (1902).

Head, pronotum, scutellum and sternum black; antennæ, lateral (broadly) and posterior (narrowly) margins of pronotum, corium, abdomen, lateral margins of sternum, and legs pale sanguineous, clavus and a curved claval margin on corium purplish black, posterior lateral margin of corium, lateral margins of abdomen, and the membrane ochraceous; rostrum, bases of femora, a spot at the posterior apices of the third and fourth, and the central area of the fourth and fifth abdominal segments black, apical joint of the antennæ stramineous, pronotum with the anterior lobe anteriorly and posteriorly defined by a linear series of coarse punctures, posterior pronotal lobe and the corium thickly punctate, lateral margins of the pronotum and corium impunctate, anterior femora robust, spined beneath, eyes prominent

Length 11 millim.

Hab. Nilgiri Hills, Ootacamund (Atkinson Coll., Brit. Mus.)

Genus COURTESIUS, nov.

Type, C. illuminatus, Dist. Distribution Burma.

Body narrowly ovate; head robust and, with eyes, wider than anterior margin of pronotum; eyes large, prominent, sessile, antennæ with the first joint shorter than head and a little shorter than second, rostrum slender, about reaching the posterior coxæ, basal joint about as long as head; pronotum with a distinct anterior collar, strongly transversely constricted behind middle, lateral margins laminate, hemelytra abbreviated, membrane absent, apex of corium truncate; clavus moderately well defined, legs normal, anterior femora moderately thickened, posterior margins of third and fourth abdominal segments outwardly curved and not reaching lateral margins

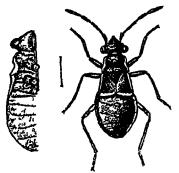


Fig 82 — Courtesius illuminatus

Length 5 to 6 millim. Hab. Burma; Teinzo (Fea).

872. Courtesius illuminatus, sp n

Black; lateral margins of the pronotum and apical margins of the comum pale luteous; lateral margins of the corium brownish-ochraceous; first joint of antenna beneath, lateral margins of prosternum, trochanters, bases of anterior and intermediate and basal halves of posterior femora pale luteous; corium coarsely punctate, just reaching the third abdominal segment.

874 Pyrrhopeplus pictus, Dist A M N H (7) ix, p 41 (1902)

Pale ochraceous, anterior area and lateral margins of pro-

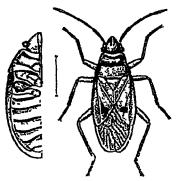


Fig 84 —Pyrrhopeplus pictus

notum, scutellum, lateral margins of corium, connexivum, lateral sternal margins, coxe and femora testaceous or very dark ochraceous, antennæ, discal margins of central lobe and basal margin of head, anterior and posterior margins of anterior raised area of pronotum, basal margin of scutellum, a rounded spot on corium near anterior angle, margins of incisures to sternum and abdomen, a central fascia to head beneath, tibiæ and tarsi black, pronotum and scutellum somewhat darkly punctate; head and

anterior transverse disk of pronotum impunctate, the last with its black margins thickly and coarsely punctate

Length 9 to 11 millim.

Hab Sikhim (Coll Dist) Sylhet (Brit Mus) Shillong, Nága Hills (Doherty) Burma, Karennee (Fea)

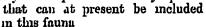
Genus PYRRHOCORIS.

Pyrrhocors, Fallén, Nov Hem Disp Meth p 9 (1814), Stål, En. Hem 1, pp 103 & 115 (1870) Platynotus, Schill Beitr zur Ent 1, p 37 (1829) Meganotus, Laporte, Ess p 38 (1832)

Type, P. apterus, Linn.

Distribution Palmarctic and Oriental Regions, one species, perhaps introduced, received from Costa Rica

In this genus the apical margin of the corium is rounded and the membrane seldom completely developed in the only species



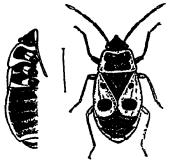


Fig 85 - Pyri hocoris apterus

875 Pyrrhocoris apterus, Linn (Cimex) Syst Nat ed x, 1, p 447 (1758), Falv Syst Int' p 721 (1775), Dist Beol Centr-Am, Rhynch 1, p 228, t xxi, t 25 (1883), pio syn ct Leth & Sev Cat Gen Hém t 11, p 249 (1894)

Black, margins of pronotum, corium, connexivum, sternal incisures and lateral and anterior

margins of prosternum, acetabula, abdominal margin, a transverse

streak on fifth, and the posterior margin of sixth abdominal segment, and the anal segment sanguineous; corium with two rounded spots, the smallest near base, the largest on disk, and its apical margin black.

Length 9 to 10½ millim.

Hab Cochin (Coll. Dist.).—Lethierry and Severin in their Catalogue also give "India" as a habitat for this widely distributed Palmarctic species. I have previously recorded it from Costa Rica

Genus SCANTIUS.

Scantius, Stal, Hem. Afr. 11, p 10 (1865); id En Hem i, p. 103 (1870)

Type, S. forsteri, Fabr., an Ethiopian species

Distribution Palearctic, Ethiopian, and Oriental Regions.

Body oblong, eyes sessile; autennæ short and incrassate: rostrum with the joints of nearly equal length, first joint shorter than the head, pronotum with the lateral margins moderately acutely laminate; hemelytra either complete or incomplete, in the latter case with the membrane absent and the apex of the corum truncate, anterior femora moderately incrassate and spined beneath near apices

876. Scantius volucris, Gerstæck in V d Decken's Reise, 111, p 413 (1873)

Piceous; lateral margins and central linear spots on basal and



Fig. 86 Scantius volucris.

apical margins of pronotum, apex of scutellum, basal lateral margins of corium, anterior margin of prosternum and lateral margins of sternum and abdomen sanguineous, coxæ and disk of abdomen castaneous; first joint of antennæ considerably passing apex of head, second almost as long as first, third shortest; pronotum distinctly transversely constricted near middle; membrane absent; corium reaching the anterior margin of penultimate abdominal segment.

Length 7 millim.

Hab Madras (Coll. Dist) Coonoor.—

Brit. East Africa and Angola (Brit. Mus).

877. Scantins pallens, sp n

Head, antennæ, pronotum, scutellum and corrum testaceous; lateral and anterior margins and central fascia to pronotum, apex of scutellum (broadly), and lateral margins to corrum pale redd' ochraceous; abdomen above and body beneath pale server posterior margin of sixth abdominal segment, spot on

head beneath, rostrum, and lateral marginal spots to sternum and abdomen piceous, legs brownish-ochraceous, tibiæ and tarsi paler; apex of rostrum sanguineous; apex of second joint and the third and fourth joints of antennæ piceous; membrane absent, apices of corium obliquely truncate and about reaching the anterior margin of penultimate abdominal segment, pronotum and corium finely punctate.

Length 8 millim.

Hab. Sind (Coll Dist.).

878. Scantius obscurus, Duet To E S 1901, p. 589

Dark piceous, unicolorous, a little paler or dark castaneous beneath, above thickly but very finely punctate, pronotum with a broad central ridge on anterior disk, its lateral margins slightly reflexed, antennæ robust, first and second joints longest and subequal in length, third a little shorter than fourth, membrane absent; apex of corium not quite reaching the anterior margin of penultimate abdominal segments

Length 7 millim

- Hab. Ceylon (Coll. Dist)

Genus DYSDERCUS.

Dysdercus, Amy & Serv Hém p. 272 (1843), Stål, Hem Afr p 13 (1865), id En Hem 1, p 103 (1870) Astemma, Laporte, Ess Hém p 37 (1832) Subg Piezodera, Sign Ann Soc Ent. Fr 1860, p 953

Type, D. cingulatus, Fabr.

Distribution Nearctic, Neotropical, Eastern Palæarctic, Ethiopian,

Oriental, and Australasian Regions

Body oblong or subelongate; head immersed to eyes, which are sessile, antennæ with the first joint longer than the second, rostrum of variable length, first joint a little longer than the head, pronotum with the lateral margins moderately ampliated and reflexed, hemelytra complete, membrane with two distinct basal cells, the veins long, ventral incisures straight, anterior femora slenderly spined beneath near apex

A. Anterior pronotal callosity black or red

879 Dysdercus cingulatus, Fabr (Cimex) Syst Ent p 719 (1775), id (Lygæus) Ent Syst iv, p 153 (1794)
Cimex superstitiosus, Thunb Nov Ins Sp 111, p 55, f 66 (1784), excl syn
Cimex kænign, Fabr Syst Ent p 720 (1775)
Astemma kæningn, Blanch Hist des Ins p 128, pl 1v, f 8 (1840)

Ochraceous, head, rostrum, anterior transverse callosity and

lateral margins to pronotum, and body beneath sanguineous; antennæ, apex of rostrum, scutellum (sometimes concolorous), a discal spot to corium, membrane and legs black, anterior collar to pronotum, anterior margin to prosternum, posterior

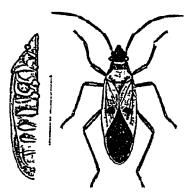


Fig 87.—Dysdercus cingulatus

margins of sternal and abdominal segments, and spots near coxe creamy-white; extreme base of first joint of antenna sanguineous.

Var a Anterior pronotal callosity black, not sanguineous
In both forms the colour above also varies from ochraceous to
stramineous, and beneath from sanguineous to dark purplish.

Length 9 to 16 millim

Hab Sikhim Assam, North Khási and Gáro Hills (Chennell)
Karáchi Calcutta Bangalore (Cameron) Ceylon (Green &
Lews). Nicobar Islands, Kamorta (Meldola). Burma; Minhla
(Comotto), Bhamo, Metaja (Fea). Tenasserim; Houngdarau
valley (Fea), Tavoy.—Distributed throughout the Malay Peninsula and Malayan Archipelago; Queensland.

Known as jhanga in Cawnpore Has attacked cotton (Gossypum herbaceum) in Seringapatam; bottle-gourds (Lagenaria vulgaris) in Cawnpore, and musk-mallow (Hibiscus Abelmoschus) and cabbages (Biassica oleracea) in Cossipore (Ind. Mus Notes, 11,

p. 106)

880. Dysdercus olivaceus, Fabr (Lygeus) Ent Syst Suppl p 540 (1798), Stål, Hem Fabr 1, p 84 (1868)

Croceous; anterior callosity to pronotum, sternum, abdomen, rostrum and legs reddish-ochraceous or pale sanguineous, antennæ and tarsi black; first joint of antennæ with its base testaceous; membrane fuscous; anterior and posterior margins of prosternum, posterior margins of meso- and metasterna, and posterior areas of the ventral segments yellowish-white; basal

fasciæ (laterally abbreviated) to third, fourth, and fifth abdominal segments fuscous.

Length 14, breadth 5 millim

Hab "India orientalis"

I have not seen this species, it was examined and redescribed by Stal, who considered it distinct from *D* cingulatus

881 Dysdercus migratorius, sp. n.

Dull obscure ochraceous; margins of pronotum, lateral and apical margins of corium, and body beneath pale luteous, head, rostrum, coxæ, anal segment, and femora castaneous; anterior transverse callosity to pronotum, scutellum, membrane, antennæ, tibiæ and tarsi piceous: transverse segmental spots to sternum and segmental fasciæ to abdomen bright ochraceous; íostrum reaching the third abdominal segment.

Var a Body beneath uniformly pale luteous, without bright

ochraceous markings

Length 10 to 13 millim.

Hab Ceylon (Brown, Vienna Mus) - East Africa, Nyassa (Cotterell, Coll. Dist.)

882 Dysdercus evanescens, Dist A M N H (7) 1x, p. 43 (1902)

Very pale ochraceous, head, anterior area and lateral margins of pronotum, scutellum, lateral and apical margins of corium, and legs reddish-ochraceous, antennæ and a small round spot on the disk of corium black body beneath pale ochraceous, lateral margins of sternum, prosternum with a spot behind the area of each eye connected by a narrow transverse line, anterior area of mesosternum, a large lateral spot to metasternum and anterior areas of abdominal segments reddish-ochraceous, abdominal marginal incisures very narrowly black, membrane pale brownish. Prosternum coalsely and roughly punctate, pronotum and corium thickly punctate, the last most finely so.

Length 17 to 20 millim

Hab. Sikhim; Mungphu (Atkinson) Khási and Gáio Hills (Chennell). Bor Ghát (Dixon) Burma, Karennee (Fea)

In some specimens the pale ochraceous coloration is uniformly replaced by reddish-ochraceous, in this case the pronotum is unicolorous. The species may also be recognized by its large size, pale membrane, &c.

B Anterior pronotal callosity concolorous with remaining area of pronotum.

883. Dysdercus mesiostigma, Dist Tr E S. 1888, p 484, pl. xiii, f 12

Ochraceous or reddish-ochraceous, antennæ, eyes, basal margin

of scutellum, a spot at basal angle of membrane, rostrum (excluding base), tibiæ, tarsi, anterior margin of mesosternum, and a lateral series of ventral spots black or piceous; membrane brownish-ochraceous; antennæ very narrowly reddish at base, first, second, and fourth joints subequal in length, third joint shortest; rostrum long, reaching the penultimate abdominal segment.

Var. a. Abdomen without the series of blackish lateral spots.

Length 19 to 22 millim

Hab Ceylon (Green)—Originally described from New Guinea (Sayer)

884. Dysdercus simplex, Walk (Dindymus) Cat. Het vi, p 6 (1873),

Dist A M N H (7) ix, p 42 (1902).

Dysdercus decorus, Bredd Ally Zeitschi Ent. 1901, p 115

Reddish-ochraceous; head above, antennæ, clavus (excluding base), inner area of corium, membrane and legs black or piceous, inner and apical margins of corium and anterior margin of pronotum pale stramineous, bases of femora reddish-ochraceous, apex of rostrum piceous and reaching the third abdominal segment.

Var. a. Head above red.—Also varies in extent of black coloration to inner area of corium, which is sometimes almost

obsolete.

Length 12 to 14 millim.

Hab. Nicobar Islands.—Also recorded from several islands of the Malayan Archipelago; Louisiade Islands

Family TINGIDIDÆ.

Hemelytra more or less reticulate, consisting of strong irregular thick lines forming a framework of cells. Anterior legs inserted on the posterior margin of the prosternum. The pronotum usually covers the scutellium, but the converse is not only found in the genus Piesma as stated by some recent writers, but is also a character of the Indian genera Phatnoma and Gonycentrum; the tarsi are two-jointed; the antennæ are distinguished by the great length of the third joint, and by the contrasting shortness of the remaining joints; the rostrum when at rest is sheltered in a deep rostral canal.

The species of this very interesting family are, except in Europe, very inadequately known, but they will probably be found in considerable numbers when economic entomology is more generally studied. They are distinctly pests to plant life, but not in a

very pronounced or easily discernible manner.

In the specific and generic diagnoses I have, for the sake of uniformity, followed Stäl, as revised by Champion, and have used the following nomenclature for the different areas of the elytra, viz, a "discoidal" or inner area, followed by a "subcostal" or intermediate area, and a "costal" or outer area; the portion analogous to that in other families, and, in some genera of Tingididæ, represented by a distinct membrane, is named the "sutural area" This membranaceous area is sometimes distinctly defined, and in such cases I use the term "hemelytra", when it is not sharply definable, I employ the term "elytra"

Stal has divided the Tingidide into two subfamilies, Piesmina and Tingitina, but as the first has not yet been found to be represented in this fauna, it is unnecessary to adopt these sections, especially as they have already created some confusion. Thus Saunders, in his 'Hemiptera Heteroptera of the British Islands,' correctly for his local purpose, but inadequately for a larger area, has used the covered or uncovered scutellum as a character

for the subfamilies.

Division CANTACADERARIA

Cantacaderaria, Stal, En. Hem 111, p 116 (1873)

Head longly produced in front of the insertion of antennæ, triangular, and above spinose; the bucculæ, or buccal laminæ, longly produced in front Scutellum covered or uncovered.

This division at present includes only a small number of genera and species, but these are widely distributed, and our knowledge is still distinctly of a fragmentary nature.

Synopsis of Genera.

A. Pronotum with five discal carine, posterior margin convexly produced, covering scutellum.

CANTACADER, p 123

B Pronotum with three discal carine, posterior margin truncate, scutellum exposed.

a. Head with porrect frontal spines, lateral pronotal margins angularly or convexly dilated, discoidal and subcostal areas of hemelytra with transversely raised lines

PHATNOMA, p 126

b. Head without porrect frontal spines, lateral pronotal margins not prominently dilated, discoidal and subcostal areas of hemelytra without transverse raised lines

GONYCENTRUM, p 125.

Genus CANTACADER.

Cantacader, Amy & Serv Hém. p 299 (1843), Fieber, Eur Hem pp 35 & 117 (1861), Stôl, En. Hem in, p. 116 (1873)
Taphrostethus, Fieber, Ent Monogr pp 29 & 40 (1844)

Type, C. quadricornis, Lep. & Sev., a Palæarctic species.

Distribution Palearctic, Ethiopian, Oriental, Nearctic, and

Neotropical Regions.

Body elongate; head elongate, triangular, buccal laminæ prominent, projecting in front of head; antennæ moderately long, first and second joints very short and incrassate, third very long, fourth moderately fusiform, about as long as first and second joints together, two spines on each side of head and the antenniferous tubercles also spined, pronotum with the frontal margin truncate, the posterior margin convexly produced behind, completely covering the scutellum, the disk with five carinæ; elytra with ill-defined clavus, but well-defined subcostal nervure; legs moderate, slender, rostrum reaching the basal abdominal area, rostral groove profound

A. Short lateral pronotal carinæ well separated from adjoining carinæ.

- a. Two outer continuous discal pronotal carina bent outwardly.
- 885. Cantacader quinquecostatus, Fieb (Taphrostethus) Ent Monogr p. 41, pl. 111, ff 18-22 (1844) Monanthia subovata, Motsch. Bull Soc Nat Mosc xxxvi (3), p. 91 (1863), Still (Cantacader), En Hent III, p 116 (1873)

Brownish-ochraceous; the costal and sutural areas much paler,

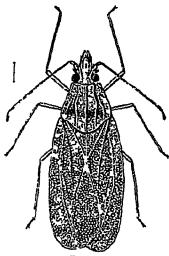


Fig 88
Cantacader guinguecostatus

with the interior of the areolets subhyalme, antennæ pale ochraceous, the apical joint piceous, pronotum with five longitudinal carine, of which the central is straight, the one on each side of this continuous and strongly bent outwardly on disk, the one on each lateral area is short with its apex directed inwardly but well separated from the adjoining carina, elytra elongate, the costal margins moderately rounded, discordal and subcostal areas almost subequal in width; head and sternum beneath greyish, body and legs ochraceous

Length 4 to 41 millim.

Hab Ceylon, Peradentya (Green) Fieber simply gives the habitat "Ostindien" (Di. Helfer)

b Two outer continuous discal pronotal carinæ nearly straight.

886 Cantacader uniformis, Dist A. M. N. H. (7) ix, p. 353 (1902).

Brownish-ochraceous, eyes piceous, base of pronotum, an irregular central transverse fascia to hemelytra, continued along inner margin of same to apex, fuscous-brown

Shape and form of C. quinquecostatus, Fieb, from which it differs by the two onter continuous carine of the pronotum being nearly straight, not convexly curved, a pale line on each side of claval apex, from which the adjacent discal vein is almost entirely black.

Length 5 millim.

Hab. North India (Brit Mus.) Burma, Rangoon (Fea)

B Short lateral pronotal carina with their apices almost touching the adjoining carina.

887 Cantacader infuscatus, sp n

Creamy-white, the margins of the arcolets fuscous; head and space between the pronotal carinæ fuscous, antennæ mutilated in specimen described, eyes piceous, pronotum with five longitudinal carinæ, three continuous, of which the two outermost are centrally slightly bent outwardly, the one on each lateral area short with its apex directed inwardly and almost touching the adjoining carina, pronotal lateral margins somewhat laminately dilate, their anterior margins terminating in a short acute spine,

elytra with the margins of the areolets almost piceous near basal lateral margin and from centre to apex; legs obscure creamy-white, extreme apices of femora fuscous.

Length $3\frac{1}{2}$ millim,

Hab. Burma, Rangoon

Genus GONYCENTRUM

Teleia, Fieber, Ent Monogn pp 29 & 55 (1844). Stål, Ln. Hem m, p 117 (1873), nom præcec Gonycentrum, Bergn Wien. ent. Zeit xvii, p 9 (1898).

Type, G con on a tum, Fieb.

Distribution. At present only known from British India *

Head rather long, triangular with a beak-shaped point; antennæ inserted at about the middle of the lateral sides of the head; rostrum extending beyond the posterior coxæ, pronotum trapeziform, scutellum and clavus distinct, uncovered, hemelytra reticulated, with the areas distinct, vertex of head passing in a curve into the obliquely lying front, which is set with short erect spines, basal area of head very convex; rostrum 4-jointed, first, second, and third joints of nearly equal length, fourth longest, antennæ with the basal joint conically incrassate, second scarcely half as long and almost globular, third longest, fourth about one-third as long as third joint; pronotum concavely sinuate at base of head, posterior margin nearly straight; apices of femora above produced in a short spine

888 Gonycentrum coronatum, Freber (Teleia), Ent. Monogr p 56, pl 1v, ff 26-32 (1844), Stâl (Teleia), En Hem 111, p 117 (1873)

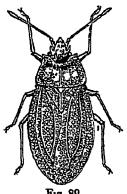


Fig 89
Gonycentrum coronatum

Greyish-yellow; basal area of head with two long contiguous spines, elliptical, head blackish-brown, punctured, lateral areas whitish, with two series of small irregular areolets, pronotum with the anterior angles obtusely angulated, anterior margin deeply concavely sinuate, scutellum small, triangular, greyish-white, hemelytra dull grey, abdomen brown, apex pale brown, femora brown, yellowish at base, tibiæ brownish-yellow.

Length 2½ millim

Hab "East India" (Helfer).

I have not seen this species, but have reproduced Fieber's figure, and endeavoured to quote the salient points of his description.

^{*} Hergroth (Ann Soc Ent. Belg viu, p 297, 1903) has proposed the incorporation in this genus of some African species described by myself in the genus *Phatnoma*, but this is clearly incorrect, as the characters are nearer those of *Phatnoma*, on account of the presence of raised transverse lines to the elytra I have since founded a new genus (*Sinalda*) for their reception.

Genus PHATNOMA.

Phatnoma, Fieber, Ent. Monogr pp. 30 & 57 (1844), Stål, En Hem 111, p 117 (1873), Champ Biol Cents - Amer, Rhynch 11, p 2 (1897)

Type, P laciniata, Fieb

Distribution Oriental, Ethiopian, and Neotropical Regions

Rostrum extending considerably beyond the metasternum, buccal laminæ prominent, projecting beyond the front of the head, antennæ moderately long, with the two basal joints short and incrassate, the third very long, the fourth moderately fusiform and longer than first and second together, head with three porrect frontal spines, two slender spines behind and two others in front, and slender spiniform antenniferous tubercles, pronotum with the base truncate, sometimes bisinuate, leaving the scutellum exposed, the ampliated margins generally acutely, sometimes convexly dilated anteriorly, tricarinate on disk; elytra with clavus and the usual areas well defined, discoidal and subcostal areas with transverse raised lines; legs slender

889. Phatnoma laciniata, *Freber*, *Ent Monogr* p 57, pl 1v, ff 33-38 (1844)

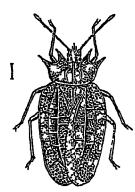


Fig 90
Phatnoma laciniuta

Pale brownish-ochraceous, lateral expanded areas of the pronotum and costal areas of the elytra paler, lateral pronotal areas finely areolate and produced in two strong, prominent, dentate spinous angulations, the disk with three central longitudinal carinæ, of which the two lateral are a little curved and anteriorly abbreviated, claval suture elevated, elytra with the discoidal and subcostal areas with distinct transverse raised lines, costal area thickly finely areolate; head anteriorly porrectly spinous

Length 4 millim

Hab. "East India" (Helfer) Ceylon
(S Green)

Division SERENTHIARIA.

Serenthiaria, Stal, En. Hem in, p 116 (1878)

Head not prominently produced in front of insertion of antennæ, bucculæ or buccal laminæ not anteriorly prominent, pronotum without anterior vesicle or hood, hemelytra usually with the discal areas absent or obsoletely defined, lateral margins not or very moderately dilated

A small division, but very imperfectly known outside the Palearctic Region.

Synopses of Genera.

A. Pronotum with a single carination, sometimes obsolete.

a. Hemelytra not laterally dulated, pronotum unarmed; antennæ moderately short and robust, discoidal and subcostal areas undefined

b Hemelytra with the costal areas dilated, pronotal angles spinous, antennæ long and slender, areas of hemelytra well defined

B Pronotum tricarinate

SERENTHIA, p 127

ETEONEUS, p 129 PARACOPIUM, p. 128

Genus SERENTHIA

Serenthia, Spin Ess p 168 (1837), Amy & Serv. Hém p 300 (1843), Still, En Hem in, p 117 (1873).

Agramma, Westw Int. Mod Class Ins., Syn Gen p 120 (1840), Fieber, Ent Monogr. pp 29, 36 (1844)

Type, S. atrıcapılla, Spin, a Palæarctic species.

Distribution Palæarctic, Ethiopian, and Oriental Regions.

Body slender, elongate; pronotum with a single carina which is often very indistinct or obsolete; orifices distinct; costal margin of the hemelytra acute, costal area somewhat ampliated, discoidal and subcostal areas undefined; femora and tibiæ subequal in length

890 Serenthia gibba, Fieber (Agramma), Ent Monogr. p 38, pl. 111, ff 7-11 (1844)

Yellowish-white, with two rows of dots on the middle of the vertex and a single row near each eye; antennæ yellowish-red.

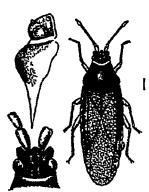


Fig 91 -Serenthia gibba.

third joint cylindrical, pronotum very convex, process with a rudiment of the central ridge, coarsely punctured, anterior margin nearly white, on both sides of middle with a shallow furrow. brownish-red to behind lateral angles; head black, shining, above and between antennæ with two short yellow spines inclined downward, sides black, their hind margins nearly white; reticulated elytra narrow, longly produced, yellowish-white, brownish at apex, marginal area considerably ridged; abdomen brown; sternum reddish - brown. coarsely punctured, anterior margin of prosternum and posterior margin of

metasternum yellowish-white; coxal pits brownish-yellow; legs rusty-yellow.

Length 2 millim.

Hab. "East India" (Helfer).

I only know this species by Freber's figures and description.

128 TINGIDIDÆ

Genus PARACOPIUM.

Paracopium, Dist A M N H (7) ix, p 354 (1902)

Type, P cingalense, Walk. Distribution. Oriental Region

Antennæ very stout and robust, first and second joints stout, first longer than second, third very long, fourth a little longer than first and second together, head not produced in front of antenniferous tubercles, obscurely centrally carnate, and with two spinous carnations extending from base to about centre of inner margins of eyes; pronotum with its anterior margin truncate, a little concavely sinuate, posterior margin longly, angularly, posteriorly developed, its disk tricarinate, central carination straight, almost continuous, the two other carnations much shorter, with their apices inwardly curved before reaching anterior margin: hemelytra with the costal area only defined, the lateral maigins sinuate, a little narrowed posteriorly; sutural area of a distinct membranaceous form, femora and tibus subequal in length.

891 Paracopium cingalense, Walk (Dictyonota) Cat. Het vi, p 178 (1873), Dist A M N H (7) 1x, p 354 (1902)



Fig 92 -- Paracopium cingalense

Pale ochraceous, antennæ, eyes, and two transverse spots behind the anterior margin of the pronotum piceous, legs ochraceous, the femora brownish-ochraceous, antennæ very stout, the apical joint stoutest and globose; pronotum tricarinate (the central carination continuous, remaining two not passing anterior area), granulate, its apex areolate, elytra areolate, sutural area well defined; under surface imperfectly seen owing to specimens being carded

Length 4 millim.

Hab. Ceylon (Thwaites, Brit. Mus).

892 Paracopium lewisi, Dust. Ann Soc. Ent. Belg. xlvii, p 48 (1903).

Fuscous-brown, lateral margins of the hemelytra pale hyaline, with transverse fuscous linear spots, pronotum with the lateral and anterior margins and the longitudinal carinations greyishly fuscous; membranous portion of the hemelytra with reticulate dark fuscous venation. Elongate, antennæ stout, robust, second joint more slender than first and about half its length, third joint nearly twice as long as first and second joints together, fourth joint a little more than half the length of third; head with a distinct pale central basal carination at inner margin of each eye,

129

pronotum with three discul longitudinal carinations, the central one straight, the lateral slightly curved; hemelytra with the margins of the discoidal area carinately defined.

Length 4 millim Hab. Ceylon (Lewis).

Differs from P. cingalense, Walk., by the less robust antennæ, more elongate form, darker coloration, &c.

Genus ETEONEUS, nov.

Type, E dilatatus, Dist Distribution Tenasserim.

Antennæ slender, pilose, first and second joints short, incrassate, second shorter than first, third very long, fourth considerably longer than first and second together, eyes well separated from anterior margin of pronotum, pronotum with the anterior margin truncate, the anterior angles shortly angulate or spinous, the posterior margin longly, angulately, posteriorly developed, the lateral angles distinctly spinous, a single central carination, the disk subglobosely gibbous, hemelytra with the costal area ampliated and composed of small arcolets, the discoidal and subcostal areas distinctly defined somewhat obliquely narrowed posteriorly.

893. Eteoneus dilatatus, Dist (Serenthia) Ann. Soc Ent Belg xlvii, p 46 (1903).

Head dark castaneous, with an ochraceous spot behind each eye; autennæ brownish-ochraceous, the apical joint piceous, pronotum



Fig 93 Etconeus dilatatus

castaneous, coarsely punctate, anterior margin ochraceous, behind which is a transverse piceous fascia, apex and a central carina on posterior area ochraceous, elytra pale ochraceous, the areas defined by brownish-ochraceous margins, discoidal and subcostal areas finely granulate, costal and sutural areas finely areolate; apices of discoidal areas, a transverse central spot to costal area, and disk of sutural area infuscated; head and sternum beneath dark castaneous, legs and abdomen beneath ochraceous; antennæ very finely and obscurely pilose, pronotum with the disk convexly

gibbous, distinctly constricted at anterior margin. elytra moderately convexly amphated at lateral margins, narrowed towards apex.

Lengtn 31 millim.

Hab Tenasserim; Myitta (Doherty)

Division TINGIDARIA.

Tingitaria, Stal, En. Hem. iu, p 116 (1873)

This division is at once separated from the preceding by the presence of an anterior pronotal vesicle or hood, which in some cases completely covers the head, the areas to the hemelytra are well defined, the costal area being frequently dilated

This is much the larger division of the Tingididæ, and is

universally distributed.

Synopsis of Genera

A. Subcostal area of hemelytra not forming an angle behind discoidal area a Pronotal hood covering head

> a Lateral margins of pronotum laminately produced, but neither reflexed nor concave

a' Lateral dilated pronotal margins with all, or nearly all, the areolets in single series .

b' Lateral dilated pronotal margins with two or three series of arcolets

b Lateral margins of pronotum laminately produced, reflexed, and concave

b Pionotal hood partly or almost covering head

a. Body longly spinous, pronotal disk irregularly carinate, enclosing foveate areas

c Pronotal hood not covering much more than base of head

 Dilated pronotal margins somewhat anteriorly extended

a' Body and hemelytra depressed, laminately expanded, pronotal expansion spinous, costal area much wider than discoidal area

b'. Body and hemelytra neither prominently depressed nor laminately expanded, pronotal expansions not spinous, costal not broader than discordal area.

b. Pronotal lateral margins dilated and laminated, but not anteriorly extended Body broad, subovate, head spinous

c Pronotal lateral margins not laminately dilated, pronotal lateral areas globosely dilated Body elongate; head not spinous GALEATUS, p 181

CADAMUSTUS, p 132.

Dulinius, p 133

URENTIUS, p 134

Collinutius, p. 184

Ammianus, p. 136

Phyllontochila, p 135

CELANTIA, p. 137

a' Hemelytra with costal area abruptly divided and laminately deflected . . .

d Pronotal hood not covering base of head

a Body strongly spinous, margins of pronotum not dilated

b Body not spinous, margins of pronotum strongly and globosely produced

e Pronotal hood present or absent, when present not extending over base of head, antennæ stout, costal and subcostal areas usually very narrow and unsernate.

B Subcostal area of hemelytra forming a distinct angle behind discordal area.

BREDENBACHIUS, p 139

CYSTEOCHILA, p. 138

AYRERUS, p 140

ELASMOGNATHUS, p 141

TELEONEVIA, p 142.

Monanthia, p 144

Genus GALEATUS.

Galeatus, Curtis, Entom. Maq 1833, p 196; Stål, Öfv Vet-Al. Forh 1874, n. 3, p 48, id En Hem 111, p 118 (1873) Tingis, part, Fieb Eur Hem pp 36, 128 (1861)

Type, G. spinifions, Fall., a Palearctic species Distribution Palearctic and Oriental Regions

Lateral margins of the pronotum strongly and laminately pro-

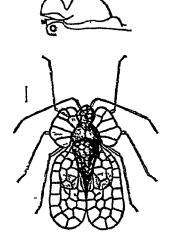


Fig 94 — Galcatus darthula

duced and largely cellular, anteriorly produced in a globose vesicle or hood which hides the head, anterior disk with three carinæ, posteriorly conchately produced; head somewhat longly spinous in front; elytra vitreous, very much longer than abdomen, strongly elevated on basal disk, the costal area with single areolets, the discoidal area with the areolets duplicated; antennæ and legs long and slender.

894. Galeatus darthula, Kirk J Bombay N H Soc xiv, p 297 (1902)

Head, pronotum, sternum and legs very pale castaneous; abdomen dark castaneous; elytra and pronotal lateral dilated margins

pale talc-like, the margins of the areolets piceous, a pale castaneous macular suffusion on the disk of each elytron, where it is gibbous;

antennæ and tibiæ very pale ochraceous, apical joints of the antennæ and tarsi piceous

Length incl. elytra 4 millim.

Hab. Ceylon, Peradeniya (Green).

Injures toliage of Bartenia strigesa (E. E. Green)

Genus CADAMUSTUS.

Cadamustus, Dist. Ann Soc Ent Belg xlvn, p 47 (1903)

Type, C typicus, Dist

Distribution At present known only from Ceylon.

Head somewhat pointed at apex, but unarmed, antennæ slender, the two basal joints only slightly shorter than apical joint, pronotum with the lateral margins strongly laminately and upwardly produced, the areolets large and the outer ones subquadrate, hood convex but compressed, truncately attenuated anteriorly, covering head, connected posteriorly with a similar pronotal elevation, elytra vitreous, twice as long as the abdomen, broadened posteriorly, broadly rounded at apices, where they are more or less divergent, somewhat widely areolated, the areolets of the costal area subquadrate, longitudinally gibbous on discoidal area, rostrum passing anterior coxe

895 Cadamustus typicus, Dist Asin. Soc Ent Belg alvii, p 47 (1903)

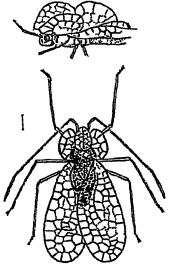


Fig 95 -Cadamustus typicus

Pale hyaline or talc-like, the margins of the areolets piceous, the abdomen piceous and more or less reflected above through the elytra, disk of the pronotum pale castaneous or pale brownishochraceous, lateral margins of abdomen reddish-ochraceous (in some specimens this character is obsolete), legs and antennæ very pale luteous, apical joint of antennæ and the tarsi pale ochraceous, the elytra have opaline reflections, the areole are large, some have piceous margins, elytral areas ill-defined or obso-

Length of body 2, to apex of elytra 4 millim

Hab Ceylon, Pundaluoya

In Ceylon this species punctures leaves of the cardamom plants, Hedychium, and allied Scitamineæ; it occurs also on the plantain (Musa) Punctured leaves have an unhealthy yellow tint (E. E. Gieen).

896. Cadamustus suffusus, Diet Ann. Soc Ent Belg xlvu, p 47 (1903)

Pale creamy hyaline; posterior disk of pronotum, and body as reflected above, brownish-ochraceous; margins of areolæ to elytra and lateral areas of pronotum brownish-ochraceous, elytra with opaline reflections and with a transverse fascia near base, a small lateral spot beyond middle, and a transverse suboblique fascia extending from inner angle to near outer marginal apex brownishochraceous body beneath dark brownish-ochraceous, legs very pale luteous; margins of pronotal posterior elongation pale luteous; antennæ ochraceous, in structure much resembling the previous species (C. typicus)

Length of body 11, to apex of elytra 3 millim Hab. Ceylon; Matale (Green). Tenasserim; Myitta (Doherty)

Genus DULINIUS

Dulmus, Dist Ann Soc. Ent Belg xlvn, p 48 (1903).

Type, D conchatus, Dist

Distribution At present known only from Ceylon.

Bostrum reaching the posterior coxæ, rostral groove nearly reaching the posterior coxe; antennæ very finely and longly pilose, first joint moderately incrassated and extending to about apex of head, which is anteriorly obtusely angulate, pronotum with much dilated, reflexed, concave, membranous margins, which are subvertical, shell-like, and rounded; hood large, globular, convex, covering the head, its posterior area also concavely dilated on each side; elytra entirely hyaline, about twice as long as the abdomen, obliquely widening from near base, the apical margins rounded, areolæ large, elytral areas very ill-defined

Allied to the Neotropical genus Dicysta.

897. Dulmius conchatus, Dist Ann Soc Ent. Belg xlvii, p 48 (1903).

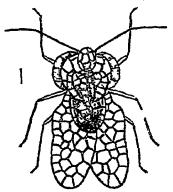


Fig 96 - Dulinius conchatus

Pale hyaline, with the margins of the areolæ pale ochraceous; hood, pronotum, extreme lateral margins of pronotum, antennæ, body and legs pale ochraceous; elytra with opaline reflections, the ochraceous lateral margins of the pronotum with distinct darker transverse spots

Length of body 2, to apex of

elytra 4 millim.

Hab Ceylon; Batticaloa (Gr The central area of this though taken collectiv the three specimens on which the genus and species are

somewhat defective Mr. Green very kindly procured me two more specimens for examination, but they were both unfortunately destroyed in transit from Ceylon

Genus URENTIUS, nov

Type, U. echinus, Dist. Distribution. Ceylon.

Longly spinous, especially at the lateral margins, head with three long frontal spines; antennæ setose, short, about as long as the pronotum, apical joint subglobose, pronotum with the anterior vesicle or hood almost covering head, its disk strongly irregularly carinate, enclosing two anterior and two lateral foveate areas, lateral margins sinuate and very strongly spined, elytra obliquely narrowed posteriorly, with the discoidal and sutural areas finely granulate, their margins spinous, the costal area broad, areolate, interior of the areolets hyaline

898 Urentius echinus, sp n.

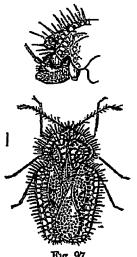


Fig 97 Urentius echinus Pale ochraceous; the areolets of the elytral costal areas hyaline, apical joint of antennæ (excluding base) brownish, body beneath and tarsal claws black; posterior margin of prosternum pale ochraceous, femora reddish-ochraceous, antennæ somewhat strongly setose.

Length 3 millim.

Hab Ceylon (S Green)

I am indebted to Mr. S. Green for a set of this species which he took during his residence in Ceylon. I have since also received the species from Mr E E Green, who writes—"Larvæ and nymphs occur on under surface of leaves, their presence being indicated above by a pale discoloration (loss of chlorophyll) Adult insects affect the upper surface of leaves."

Genus COLLINUTIUS, nov.

Type, C. aluelles, Walk
Distribution British India

Pronotum with a prominent, slightly oblique porrect process, extending above and beyond the eyes, head with a prominent spine in front of eyes, antennæ somewhat longly setose, fourth join t

longer than first and second together; rostrum mutilated in specimen described; pronotum tricarinate, the lateral margins broadly and a little upwardly laminate and areolate, their margins rounded, posteriorly longly and angularly produced; elytra strongly rounded and widened from base, apical area broader than basal area, discoidal area strongly defined, the areolets small and somewhat opaque, subcostal and costal areas not definable, the areolets larger and more hyaline, a character which also applies to the sutural area



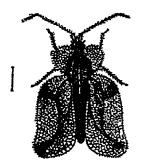


Fig 98
Collinutius alicollis

899. Collinatius alicollis, Walk. (Tingis)

Cat Het vi, p 182 (1873), Dist.

(Phyllontochila) A. M. N. H. (7) ix,
p 354 (1902)

Very pale ochraceous, disk of pronotum, the abdomen, a transverse fascia crossing elytra near base from costa to margin of discoidal area, fuscous; discoidal and sutural elytral areas tinged with fuscous, apical joint of antennæ (excluding base) piceous

Length 5½ millim.

Hab. "Hindostan" (Brit. Mus.)

The unique type of this genus and species is unfortunately in a somewhat poor condition

Genus PHYLLONTOCHILA.

Monanthia, subg Pyllontocheila, Fieber, Ent. Monogr p. 59 (1844)

Monanthia (part), Fieber, Eur Hem pp 36 & 119 (1861)

Phyllontochila (part), Stäl, En Hem iii, p 120 (1873)

Platychila, Fieber, in litt; Puton, Synops 1879, p. 107

Subg Tingis, Stäl, En Hem iii, p 130 (1873)

Subg Elasmotropis, Stäl, Öfv. Vet -Al. Forh 1874, no 3, p 54

Sakuntala, Kirk J. Bomb N. H. Soc. xiv, p 298 (1902)

Type, P. ampliata, Fieb., a Palæarctic species.

Distribution. Palæarctic, Ethiopian, Oriental, and Australasian

Regions.

Head anteriorly trispinous: pronotal vesicle or hood not extending over base of head; lateral margins of pronotum more or less dilated, its disk tricarinate, elytra with the discoidal area about as wide as the costal area or occasionally slightly narrower, elytral lateral margins slightly narrowed posteriorly towards apex, apices rounded, when folded almost truncate; antennæ moderately long, first and second joints incrassate, first joint longer than second.

900. Phyllontochila ravana, Kirl. (Sakuntala) J. Bombay N. H. Soc. xiv, p. 298 (1902), Diet Ann Soc Ent. Belg xlvii, p. 51 (1908)

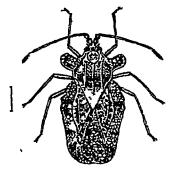


Fig. 99 - Phyllontochila ravana

Antennæ piceous, the third joint castaneous; head piceous, the anterior spines luteous, pronotum pale luteous, the disk and suffusion to lateral produced margins piceous; elytra with the discoidal and subcostal areas ochraceous, opaque; costal area hyaline with blackmargined areolets; a transverse (sometimes broken) central fascia, preceded and followed by a small spot on costal area and a larger spot near apex of costal area, piceous; sutural area piceous mottled with

luteous; body beneath, femora, and tars: piceous, tibiæ ochraceous.

Length 6 millim.

Hab. Ceylon; Peradeniya (Green)

Larva and adult frequent the blossoms of Vitex trifolia (E. E. Green).

901. Phyllontochila dentata, Fieber (Monanthia), Ent Monogr p 71, pl. vi, ff. 2-4 (1844), Still, En Hem. 11, p 128 (1873)

Yellowish, lateral areas of pronotum broad, quadrangular, their margins tridentate, lateral ridge straight, shortened anteriorly, reticulated elytra oval, finely pilose, marginal area broadened posteriorly, with a large brown spot before middle and another near apex, several smaller spots on the central and lateral areas, head and antennæ concealed, anterior margin of pronotum with a quadrangular projecting hood, disk of pronotum transversely convex, finely punctured, ridge very slightly elevated, lateral ridges abbreviated in front, the lateral areas very broad, leaf-like, quadrangular, truncated anteriorly, with a dentate point on neck, and with three similar angulations on lateral margins, lateral angles with five series of small areolets, several of which form a brown spot at the posterior angle body beneath and legs obscure yellow

Length 5 millim

Hab "East India" (Helfer)

I only know this species by Fieber's figure and description

Genus AMMIANUS, nov

Type, A erosus, Fieb

Distribution. Oriental and Ethiopian Regions

Allied to Phyllontochila, but differing by the more depressed and laminately expanded body and elytra, the much more produced

and angulated or spined lateral margins of the pronotum, the elytra with the costal area very broad, much wider than the discoidal area, the elytral lateral margins not narrowed posteriorly, elytral apices oblique and when folded centrally sinuate

In this genus I include Phyll perakensis, Dist, and the Ethio-

pian P. dilatata, Guér, and allies

902 Ammianus erosus, Fieber (Monanthia), Ent Monogr p. 74, pl vi, ff 5-9 (1844); Walk (Tingis) Cat Het vi, p 181 (1873), Dist. (Phyllontochila) A. M. N. H. (7) ix, p 355 (1902)

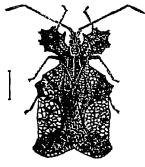


Fig 100 -Ammianus erosus

Head and anterior pronotal vesicle grey with some fuscous markings; antennæ brownish-ochraceous; pronotum castaneous, its disk piceous, the basal area of the dilated pronotal margins irrorated with pale hyaline areolets; elytra with the discoidal and subcostal areas castaneous, opaque, the costal area hyaline; margins of areolets, a broad transverse fascia before middle, and apex piceous, sutural area piceous; body beneath and legs piceous, tibiæ brownish-ochraceous

Length 7 millim.

Hab. "Ostindien" (Helfer, fide Fieber) Burma, Bhamo (Fea).

Genus CELANTIA, nov.

Type, C. vagans, Dist. Distribution. Ceylon

Head spinous, a long porrect spine arising at base of head and extending beyond its apex, a long curved spine from behind each eye, and a smaller spine near each antenniferous tubercle; pronotum with the anterior vesicle or head not extending beyond base of head, sublunate, with its apical margin truncate; pronotal lateral margins laminate, areolate pronotal disk tricarinate, antennæ very long, much more than half the length of the body, apical joint about as long as first and second joints together, elytra with the subcostal area narrow, the discoidal area concave, costal area broad, areolets somewhat large

Allied to the Neotropical genus Leptodictya, Stäl, from which it differs by the very long antennæ, different structure of the

pronotum, &c.

903 Celantia vagans, Dist (Leptodictya) Ann. Soc. Ent Belg xlvii, p 48 (1903)

Ovate, the margins of the pronotum and elytra convex, antennæ ochraceous, the apical joint piceous; nead ochraceous; eyes piceous, pronotum with the disk castaneous, the hood and carinæ ochraceous, lateral marginal areas and posterior area very pale

luteous, the last thickly reticulated with piceous, and the re-

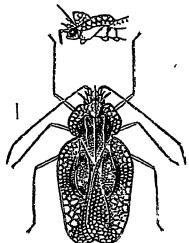


Fig 101 - Celantia vagans.

ticulations of the lateral areas. more or less fuscous; elytra very pale luteous or creamywhite, the discoidal areas thickly obscurely granulate and piceous towards base and apex, a central piceous suffusion to costal and sutural areas, the last subhyaline, the reticulations beyond middle and at apex and mner apical areas piceous, legs ochraceous, tarsi piceous body beneath pale castaneous with piceous markings (imperfectly seen-carded specimen). Head with five long spines, the lateral spines moderately recurved, the other spines directed straightly forward, pronotal lateral areas

laminate, convex, reticulate, hood not quite reaching middle of pronotum; elytral marginal areas convexly ampliated at middle, attenuated anteriorly and posteriorly.

Length 3 millim Hab Ceylon (Lewis).

Genus CYSTEOCHILA

Fig 102 Cysteochila elongata

Cysteochila, Stal, En Hem 111, pp 121 & 129 (1878)

Type, C tingoides, Motsch.

Distribution Ethiopian and Oriental

Regions.

Lateral margins of the pronotum reflexed, not produced, apices of femora not spined; buccal laminæ prominent, pronotal carinæ prominent and subparallel; body with hemelytra oblong or elongated

904 Cysteochila elongata, Dist. Ann Soc Ent Belg xlvn, p. 49 (1903)

Pale brown, antennæ ochraceous, apical joint, excluding base, piceous, head black, interior margins of eyes luteous; apex of pronotum, apices of discoidal areas, small lateral spots to costal membrane, and a few subapical

areolæ to elytra luteous or creamy-white, meso- and metasterna

and abdomen beneath black; legs ochraceous; body elongate; pronotum with three central longitudinal carinæ, the hood and lateral areas coarsely granulate; elytra with the discoidal areas coarsely granulate, the apical areas finely areolate, the lateral margins a little concavely sinuate before apices, sternum finely granulate.

Length 3 millim.

Hab. Assam; Margherita.

905. Cysteochila nexa, Dist Ann Soc Ent Belg alvu, p 49 (1903).

Head and disk of pronotum castaneous; apical area of pronotum and the elytra pale brownish, the last with the costal membrane irrorated with creamy-white areolets; body beneath piceous, the sternum thickly greyishly pilose, legs ochraceous; antennæ with the basal joint ochraceous, remaining joints mutilated in type specimen; pronotum with a single pale longitudinal carina, the two lateral carinæ covered by the lateral vesicles and only posteriorly visible, the lateral areas and hood concavely granulate; elytra with the discoidal and costal areas granulate, apical areas more thickly and finely granulate, the elytral areas defined by more or less ochraceous margins.

Length 3 millim.

Hab. Assam; Margherita.

906. Cysteochila tingoides, Motsch. (Monarthia?) Bull Soc. Nat Mosc xxxvi, p 92 (1863); Stål, En. Hem ni, p 129 (1873)

"Depressed, elongate, subparallel, excavately cellular, opaque, carinate, obscure whitish, somewhat fuscously variegated; eyes, head posteriorly, and prolongation of the pronotum black; rostrum, antennæ and legs reddish, carinæ somewhat white head short, subtriangular, unarmed, eyes moderate in size, oblong, somewhat prominent, granulate; antennæ with the first joint a little shorter than the head, incrassate, pronotum with the anterior margin equal in width to head, whitish, posteriorly ampliately dilated, on each side laterally covered with an inflated vesicle, medially black, tricarinate; hemelytra elongate, nearly parallel, apices rounded, with posterior subspical lateral hyaline spots. body beneath black, annulated with ferruginous, opaque; femora moderately clavate"

Length " 12 l."

Hab. Ceylon, Newera Ellin Mts. (fide Moischoulsky)

I have not seen this species, but Stal has recorded a Ceylonese specimen in the Stockholm Museum, and referred it to Oysteochila

Genus BREDENBACHIUS.

Bredenbachius, Dist Ann. Soc. Ent. Belg xIvii, p 50 (1903).

Type, B. pictus, Dist.

Distribution. Tenasserim.

Broadly elongate, elytra much longer than abdomen; pronotum with the apex broadly triangular, its lateral areas globosely dilated

as in Cysteochila, but directed obliquely outward, elytra with the costal area abruptly divided and laminately deflected from the discoidal area

Allied to Cysteochila, but differing in the structure of the pronotum and elytra as above detailed

907. Bredenbachius pictus, Dist Ann Soc Ent. Belg xlyn, p 50 (1903)



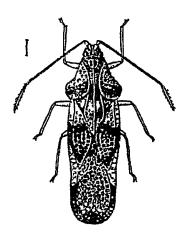


Fig 103
Bredenbachtus pictus

Head and antennæ ochraceous, apical joint of antennæ, excluding base, piceous, pronotum castaneous, anterior area, apex and central carino pale creamy-white, elytra creamy-white, disk of discoidal area infuscated, a central elongate piceous spot to costal area, sutural area infuscated, pale at base and apex, body beneath piceous, legs ochraceous; pronotum with three central caring, the median one procurrent and straight, the two lateral caring commencing from inner margin of lateral globose areas and deflected towards posterior apical margins, giving the prolongation a scutellate appearance, the disk is coarsely punctate, the lateral areas foventely reticulate; elytra reticulate, the areolets distinct, those on the costal membrane transversely quadrate apical roint of antennæ setose

Length 3 millim
Hab. Tenasserim, Myitta (Doherty).

Genus AYRERUS, nov.

Type, A hystricellus, Richt

Distribution, Ceylon

Allied to *Urentius*, but differing by the totally uncovered head, the disk of pronotum covered with two large vesicular processes,

lateral margins not sinuate

My knowledge of this genus is confined to the figure given by Richter, which is unfortunately accompanied by no description. Referring, however, to the "complete armature of spines, which project from various parts of the head, thorax, and elytra," he further remarks "Each of these spines, when examined by a somewhat higher power, is found to have a sharp point or seta, projecting as from the open end of an investing sheath"

908 Ayrerus hystricellus, Richtei (Tingis), Hai dwicke's Sci Gossip, v p 84, f 25 (1869), S Green (Tingis), op. cit xviii, p 161 (1882)

Neither description nor dimension is given of this species, which, however, appears to be admirably figured, and the figure is here reproduced

Hab. Ceylon (Staniforth Green).

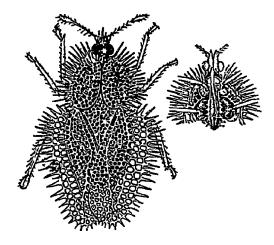


Fig 104.-Ayrerus hystricellus

The description of this species, from its little known medium of publication, has escaped the notice of entomologists and appears in no record or catalogue. It was found by Mr. S. Green on the underside of the Brinjál leaf (Solanum melongena), where it "undergoes all its changes from the larval to the perfect state."

Genus ÉLASMOGNATHUS.

Elasmognathus, Freber, Ent. Monogn pp 30 & 90 (1844), Stal, En Hem 111, p 121 (1873)

Type, E helfern, Fieb.

Distribution Oriental and Ethiopian Regions

Head spined at the antenniferous tubercles, and with a short suberect central spine near base, pronotum with the anterior vesicle or hood not covering base of head, lateral margins very strongly and globosely produced, the processes anteriorly directed, tricarinate, the lateral carinæ very short, antennæ with the first joint strongly incrassated, as long as or slightly longer than the second; apices of femora very prominent above at insertion of tibiæ, sometimes spinous.

A. Pronotal produced margins globose, elytra broadened posteriorly, apices of femora prominent.

Elasmognathus greeni, Kirby, J Linn. Soc., Zool xxiv, p 109 (1891), Kirk J Bombay N H Soc xiv, p 297 (1902) 909 Elasmognathus pallidus, Kurby, tom cit p 110

Black, antennæ, anterior pronotal vesicle, apex of posterior pro-

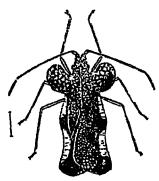


Fig 105 Elasmognathus greens

notalelongation, costal membrane, and legs strammeous, basal joint of antennæ (excluding apex), apical joint of antennæ (excluding base), transverse lines and a large median and apical spot to costal membrane, and the tarsı black

Var. Pale testaceous; head above black, pronotum with vesicle and produced lateral margins nearly white.

Length 5½ to 6 millim.

Ceylon, Pundaluoya and Nitagala (Green)

This species punctures the leaves of the cultivated pepper vine (Piper

mgrum). It makes the leaves look spotted with brown along the lines of the main veins, but does not appear to seriously injure the health of the plant The insect feeds on the under surface of the It occurs both on cultivated and wild pepper throughout Ceylon. (E E Green.)

B. Pronotal produced margins foveate above, elytra somewhat narrowed posteriorly; apices of femora spined

910. Elasmognathus helferi, Fieber, Ent Monogr p 91, pl vii, ff 33-41 (1844)

Differing from the preceding species according to Fieber's figure, by the foveate and shell-like produced pronotal margins, the somewhat narrowed apical areas of the pronotum, the more reticulate areolation of the costal area of elytra and smaller size of the median and apical spots to same, strongly spined apices of the femora, &c

Length 6 millim.

Hab. "Ostindien" (Helfer, fide Fieber)

I have not seen this species.

Genus TELEONEMIA.

Teleonemia, Costa, Ann Mus Zool Napoli, n, p 144 (1864); Stal, En Hem 111, pp. 122 & 181 (1873), Champ. Biol Centr-Amer, Rhynch 11, p 34 (1898) Subg Amaurosterphus, Stål, Hem Fabr. 1, p. 92 (1868), id. En

Hem 111, p 131 (1873)

Subg Teleonemia, Stal, En Hem. loc. cit.

Type, T. funerea, Costa, from an unknown locality.

Distribution. Nearctic, Neotropical, Oriental, and Ethiopian

Regions.

For the inclusion of some Central American species, Champion has rather enlarged the characteristic limits of this genus, and I with some further latitude follow his diagnosis. Narrow and elongate; head obtuse, usually with five more or less distinct spines; antenniferous tubercles somewhat prolonged; antennæ rugulose, in some species pilose, stout, the third joint variable in length, usually somewhat truncate at apex, fourth joint long, more or less lanceolate or oval; pronotum tricarinate, with or without a hood discoidal area extending to beyond the middle of the elytra, the subcostal and costal areas in the typical species very narrow and uniseriate, but sometimes broader and with more numerous areolets; elytra much longer than abdomen.

911. Teleonemia assamensis, Dust Ann Soc Ent. Belg xlvii, p. 49 (1903)

Pale ferrugmous; antennæ castaneous; head above greyishly

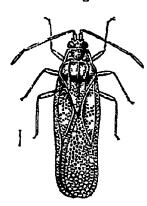


Fig 106
Teleonemia assamensis

pilose, eyes and a spot between them black: anterior and lateral margins of the pronotum narrowly pale luteous, anterior pronotal area with a gibbous convex callosity very coarsely punctate, behind which, on each side, are two small transverse black lines, its marginal areas greyish; pronotum profoundly tricarinate, posteriorly punctate between the carinations; hemelytra with the discoidal area coarsely punctate, remaining surface finely areolate, lateral margins finely and palely cellular; body beneath piceous, greyishly pubescent, especially on sternum; legs pale castaneous.

Length 4 millim.

Hab Assam; Margherita

912. Teleonemia atra, Motsch (Monanthia) Bull Soc Nat Mosc. xxxvi, p 91 (1863), Dist A. M. N. H. (7) 12, p 356 (1902).

Head and pronotum (excluding basal prolongation) black; basal prolongation of pronotum and hemelytra areolate, brownish grey, margins of areolets fuscous. antennæ, carination to head and pronotum, anterior and lateral margins of pronotum, legs, and body beneath pale stramineous; lateral regions of abdomen (excluding base) and sternum black, the connexivum above and beneath finely spotted with pale stramineous. In some specimens the basal prolongations of the pronotum and hemelytra are shining greyish, the sutural area alone being brownish grey.

Length 3 millim.

Hab Ceylon (Green)

Genus MONANTHIA

Monanthia, Lepell. & Serv Encycl. Meth x, p 653 (1825), Stat, Ofv Vet -Ak. Forh 1874, n 3, p 58

Type, M echni, Schranck, a Palmarctic species.

Distribution. Palearctic, Ethiopian, and Oriental Regions.

Hemelytra with the subcostal area distinctly forming an angle at apex of discoidal area, discoidal area near middle with a transverse divisional vein; pronotum with the lateral margins strongly reflexed, sometimes, as in the species here included, somewhat strongly inflated, hemelytra with subbasal elevations, antennæ slender, apical joint fusiform, its base slender.

913. Monanthia globulifera, Walk (Tingis) Cat Het. vi, p 182 (1873), Diet A M N H (7) ix, p. 356 (1902)

Dull obscure ochraceous; pronotum with disk piceous, margins

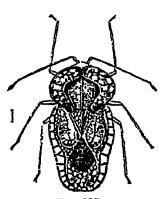


Fig 107 Monanthia globulifera

of areolets to dilated lateral margins and to the apical sutural area black, hemelytra with the areolar margins to discoidal and sutural area spiceous, the foveate disk to discoidal area also more or less piceous, costal area hyaline, uniseriate, transverse veins black, body beneath black; legs ochraceous; posterior margin of metasterium and lateral margins of abdomen dull luteous, antennæ pale ochraceous, apical joint a little darker, hemelytra with a large subbasal foveate callosity

Length 3 millim.

Hab. Madras (Elliot, Brit. Mus). Ceylon (Green) At Madras this insect lives on heliotrope (Elliot)

914 Monanthia nilgiriensis, Dist Ann. Soc. Ent. Bely xlvn, p 51 (1903)

Pale hyaline, head and lateral convex margins of the pronotum piceous, disk of pronotum, abdomen above and body beneath black, lateral areas of pronotum hyaline, the margin of the areolets and a transverse fascia from disk to margins piceous, elytra hyaline, the margins of the areolets mostly piceous, margins of the discoidal area and a large raised globular discoidal spot piceous, sutural area piceous, margined with pale areolets and containing two distinct central white spots, legs, antennæ, and anterior area of pronotal dilatation beneath with marginal spots to same ochraceous, apical joint of antennæ and posterior femora piceous. The pronotum is roundly and much dilated, with reflexed, concave, membranous margins, which are subvertical,

shell-like and rounded; head uncovered, the globular elevations to discoidal area of elytra presenting a small central concave spot.

Length, body 4 millim., to apex of elytra 5 millim.; exp. pronotum 3 millim.

Hab. Nilgiri Hills (Hampson)

915. Monanthia? fasciata, *Freber*, *Ent Monogr* p. 84, pl. vii, ff 18-16 (1844)

Obscure yellow, moderately long, hood with a pointed projection, pronotum very convex, lateral areas raised, leaf-like; head black, spines on vertex yellow, the three anterior ones on and over each other; rostral sheath, sides of head, and the short tuberosities before eyes yellow, antennæ whitish-yellow and very finely pilose, apical joint brownish, pronotum transversely convex, the raised leaf-like marginal areas with quadrangular areolets, and set with horizontal diverging bristles, middle ridge depressed on the hood, lateral areas almost semicircularly raised to above the level of the lateral angles; areolated elytra curved outwards, undulately narrowed posteriorly, at inner angle of central area a narrow brown transverse fascia extending to outer margin, near apex an oblique marginal spot, sternum mostly whitish-yellow, abdomen brown or yellowish-brown; legs whitish-yellow; femora with brown medial annulations; tibiæ with their apices brown.

Length 4 millim.

Hab. East India (Helfer)

I only know this species from Fieber's figure and description. It may probably represent a new genus.

Species of uncertain position.

Cymus basicornis, Motsch Bull. Soc. Nat. Mosc. 1863, p. 90.

Hab Ceylon

This species is described under the name of a genus of Lygzidze, but placed in the "Tingides" by Motschoulsky. I have quite failed to identify it and its position is enigmatical.

Family PHYMATIDÆ,

Anterior legs short and stout, with long coxe, short thick

femora, and curvate pointed tibie, frequently without tarsi

These are predatory insects Uhler (Bull. U.S. Geol & Geogr. Surv in, p. 428, 1877) found some species in Colorado, generally "prowling about upon the stems and flowers of the Euphorbias and sunflowers, trying to catch the bees and other insects which alighted there."

Four genera and thirteen species are here enumerated, which in this small family is probably a fairly representative number for

British India

Synopsis of Genera

A Body not spinose

a Anteocular portion of head shorter than postocular portion

a Abdomen dilated, not perceptibly longer than broad Scutellum half as long as abdomen

b Abdomen not dilated, about twice as long as broad Scutellum scarcely reaching to a third part of abdomen

b Anteocular and postocular portions of head about equal in length Scutellum reaching apex of abdomen B Body spinose AMBLYTHIREUS, p 146

CNIZOCORIS, p 149

GLOSSOPELTA, p 150 CARGINOCORIS, p 151

Genus AMBLYTHYREUS.

Macrocephalus, subgen Amblythyreus, Wester Ti E S III, p 30

Amblythyreus, Amy & Serv Hêm p 291 (1843), Stâl, En Hem v, p 131 (1876), Handlusch, Ann Hofmus Wien, xii, p 209 (1897)

Mecodactylus, Freber, Eur. Hem p 34 (1861)

Type, A rhombiventris, Westw. Distribution. Oriental Region

Head long, margins subparallel, postocular portion much longer than anteocular, ocelli distinct, placed near middle of postocular area, antennæ short, robust, apical joint longest, stoutest, and fusiform, second shortest, subglobose, first regularly incrassated, rostrum just passing base of head, first and second joints subequal, third very short; pronotum sinuately narrowed to apex from lateral angles, which are prominent, subacute, lateral margins serrate, anterior angles prominent, anterior margin concavely sinuate, posterior margin a little sinuate, about as wide as base of scutellum, posterior disk with two diverging central carinæ; scutellum somewhat short, broad, its apex convexly rounded, its lateral margins

straight, abdomen more or less augularly dilated on each side; membrane reaching or slightly passing abdominal apex; anterior coxe longer, only a little shorter than femora

916 Amblythyreus angustus, Westw Tr E S m, p 31 (1843), Handl Ann Hofmus Wien, x11, p 212, f 29 (1897)

Pale ochraceous; head above and antennæ piceous, a central

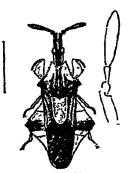


Fig 108
Amblythyreus angustus.

longitudinal fascia and posterior area to pronotum and a central transverse fascia to connexivum piceous-brown; corium very pale brownish; membrane shining cupreous, first joint of antennæ regularly increasate, second joint subglobose, attenuated at base, slightly shorter than third, fourth prominently increasate, fusiform, about as long as the other joints taken together, lateral margins of pronotum serrate, connexivum widely and angularly dilated; width of scutellum at base less than length of head

Length 11½ to 12; breadth between pronotal angles 4½ millim.

Hab Assam, North Khási and East Gáro Hills (Chennell)

917. Amblythyreus gestroi, Handl Ann. Hofmus Wien, xii, p 211 t ix, f 52 (1897)

Head, antennæ and pronotum piceous; base and apex of apical joint of antennæ, posterior area of pronotum, and the corium more or less castaneous; anterior lateral margins of pronotum, scutellum, connexivum, head and body beneath, rostrum, and legs luteous, a small spot at basal angles of scutellum and a broad transverse fascia at middle of connexivum black, abdomen above ochraceous, apex and a discal longitudinal fascia black, membrane pale shining cupreous

Closely allied to the preceding species, A angustus, Westw; antennæ less robust, pronotal lateral angles a little more acutely produced

Var Basal joint of rostrum, head beneath, lateral angles of prosternum, a marginal spot at extreme dilatation of abdomen, and abdominal apex piceous-black

Length 11, breadth between pronotal angles 4 millim Hab. "East India" (Coll. Dist.) Burma; Karennee (Fea).

918. Amblythyreus stalii, Handl Ann Hofmus Wien, xii, p 209, t. ix, f 49 (1897)

Reddish-vellow, posterior margin and angles of pronotum

transverse band to abdomen above and antennæ dark brownishred, head and fourth joint of antennæ blackish above, corium
reddish-yellow; legs yellow, head long; rostrum with the first
and second joints nearly equal, antennæ thick, first joint comparatively- short, twice as long as broad, second joint 2½ times,
third twice, fourth scarcely more than three times as long as
broad, twice as long as second and third together, pronotum subtriangular, 1¾ times as broad as long, a distinct impressed medial
line on anterior area, two middle keels distinct, obsolete before
and behind, lateral angles pointed and triangular, directed a
little upward and backward, anterior coxæ only a little shorter
than femora, scutellum flat, only about one-sixth longer than
broad, without keel, membrane fuscous, nervures darker, connexivum with its first and second segments projecting at hind
angles, that of third segment angularly produced

Length 11 millim

Hab. Pondichery (Vienna Mus)

I have not seen this species.

919. Amblythyreus quadratus, Westw Tr E S m, p 31 (1843), Handl Ann Hofmus Wien, xii, p 212 (1897)

Ochraceous, lateral pronotal angles and a spot on extreme dilatation of connexivum piceous, head and antennæ brownish-ochraceous, the last with the base of apical joint pale ochraceous; scutellium broad, about as long as head, about as broad at base as long, abdomen somewhat widely dilated, obtusely angulate at its extreme dilatation, where its width is about equal to its length; head finely granulate; posterior area of pronotum coarsely punctate, lateral pronotal angles subacute and a little upwardly reflexed

Length 10, breadth between pronotal angles 4 millim. Hab "East Indies" (Mus Oxford & Vienna).

920 Amblythyreus intermedius, Handl Ann. Hofmus Wien, xii, p 210, t. vi, f 7, t ix, ft 50, 51 (1897)

Allied to A rhombwentris, Westw; abdomen widely dilated, acutely, not obtusely, angulate at its extreme dilatation, where its width is considerably greater than its length, scutellum short, broad, about as long as head, but longer than broad at base, a broad piceous transverse fascia at centre of connexium, postocular area of head not piceous; posterior margin of pionotum less broadly piceous

Length 10 to 12 millim

Hab Bengal. Trichinopoly. Kodaikanál, Palm Hills (fide

Handlirsch)
I only know this species by the description and beautiful figure given by Handlirsch

921. Amblythyreus rhombiventris, Westw Ti E S m, p. 30, pl n, f 8 (1843), Handl. Ann Hofmus Wien, xii, p 211, f 28 (1897)

Ochraceous; upper surface of postocular area of head, posterior margin of pronotum, including lateral angles, a spot on extreme abdominal dilatation and another at apex of connexivum piceous; corium and abdomen above testaceous; membrane shining cupreous; scutellum short, broad, sinuate at base, about as long as head, and almost as broad at base as long; abdomen widely dilated, obtusely angulate at its extreme dilatation, where its width is considerably greater than its length; head finely granulate; posterior area of pronotum coarsely punctate, lateral pronotal angles subacute and a little posteriorly directed.

Length 13, breadth between pronotal angles 5 millim.

Hab "India" (Mus Oxford)

The type is now labelled "ex Linn. Soc Sale"

Genus CNIZOCORIS.

Cnizocoris, Handl. Ann. Hofmus Wien, XII, p 213 (1897)

Type, C. davidi, Handl., from Tibet.

Distribution. Oriental and Eastern Palæarctic Regions.

Allied to Amblythyreus, but with the abdomen not dilated, almost elliptical, and twice as long as broad; scutellum shorter, not extending beyond a third of the abdominal length.

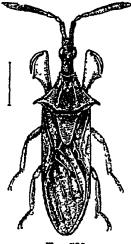


Fig 109
Cnizocoris stenocephalus

922 Cnizocoris stenocephalus, Handl Ann Hofmus Wien, xn, p 214, t iv. ff 53, 63 (1897).

Head and antennæ blackish-brown, thorax yellowish-brown beneath and reddish-blown above, darker in middle and on margins; margins of sternum blackish in upper parts, scutellum reddish-brown, abdomen yellowish-brown beneath, black above, connexivum uniformly brownish, legs yellowish-brown, partly darkened; rostrum brown

Length 10 millim.

Hab. Darreling (Paris Mus)

I have not seen the unique type, but have to thank Mons. Joanny Martin, of the Paris Museum, for very kindly

providing me with the accompanying figure of the same.

Genus GLOSSOPELTA

Glossopelta, Handl. Ann Hofmus Wien, xu, p 215 (1897)

Type, G. acuta, Handl.

Distribution Oriental Region

Head very long, anteocular as long as postocular portion, scutellum very long, reaching apex of abdomen, its apex truncate, abdomen slightly or prominently dilated on each side. Very peculiar and distinct characters exist on the underside of the head, as described by Handlirsch, but as the primary end of this book is to afford the easiest means of recognition by which the British Indian species may be identified, they are not further alluded to in this place.

923. Glossopelta truncata, sp n

Pale brownish-ochraceous, posterior area of pronotum and



Fig 110 — Glossopelta truncata

bases of scutellum and corium infuscate, antennæ mutilated in specimen described, pronotum with a very broad and profound central sulcation extending over rather more than posterior half, the sulcated area moderately punctate, the remaining posterior area very coarsely punctate, anterior angles subacutely poriect, posterior angles broadly truncate, scutellum with a narrow central carination, broadened near base, where there is also a transverse carination, lateral margins strongly concavely sinuate before middle, its whole surface finely granulate, more coarsely so near base, connexivum convexly ampliated on each side

Length 11, breadth between pronotal angles 4 millim. Hab Burma, Ruby Mines (Doherty)

924 Glossopelta acuta, *Handl Ann Hufmus Wien*, xii, p 216, t vi, f 4, t 1x, fi 55, 56, 65 (1897)

Dull ochraceous; head, anterior lobe of pronotum, connexivum, body beneath, and legs reddish-ochraceous, antennæ pale, with the apical joint longer than the two preceding joints taken together, pronotum with the anterior angles short, obtusely porrect, lateral angles obtusely angulate and with a short angulate point on about the middle of their posterior lateral margins, two distinct central carinæ at junction of anterior and posterior lobes, the posterior lobe very coarsely granulate on its lateral areas; scutellum with faint indications of a narrow central carination; connexivum moderately and somewhat convexly angulated, the posterior angles of the segments moderately prominent.

Length 10 to 11½; breadth between pronotal angles 3¾ millim Hab. Burma, Karennee (Fea).—Also recorded from Sumatra

Genus CARCINOCORIS.

Carcinocoris, Handl. Ann Hofmus Wien, xii, p 219 (1897)

Type, C. castetsi, Handl.

Distribution. Oriental and Papuan Regions.

Head long, spinous, postocular area much longer than anteocular; scutellum long, sometimes nearly as long as the abdomen, its margins and a central carination more or less spinous; abdomen more or less dilated, longer than broad, but never twice as long as broad; margins of pronotum and abdomen largely spinose; legs spinose, intermediate and posterior legs more strongly so.

A. Scutellum with the lateral margins parallel, not narrowed at apex.

a. Abdomen dilated, its margin angulate.

925 Carcinocoris hampsoni, Dist A M N H. (7) ix, p 357 (1902)



Fig 111 Carcinocoris hampsoni

Somewhat intermediate between C. castetsi, Handl., and C. erinaceus, Handl. Scutellum long and slender, as in C erinaceus, but with the lateral margins straight, not sinuate; abdominal margins expanded and angulate, as in C castets, Handl, but all the marginal spines, both to it and the pronotum, much less robust

> Ochraceous, apex of corium, membrane, and a transverse central fascia to abdominal dilatations umber-brown; scutellum almost reaching apex of abdomen, its lateral margins longly spinous, but much less so on basal area.

Length 8½, breadth 5 millim.

Hab Nilgiri Hills (Hampson); Ootacamund (Atkinson Coll., Brit Mus).

b Abdomen dilated, its margins rounded, not angulate.

926 Carcinocoris binghami, Sharp (Carcinochelis), Ent. Month Mag. xxxii, p 35 (1897), id Cambr Nat Hist vi, p 554, f 267 (1899), Dust A M N H (7) 1x, p 357 (1902)

Allied to C. erinaceus, Handl, but with the scutellum a little shorter, its margins nearly straight, not sinuate, apex not narrowed, but broadly rounded; margins of abdomen convex, not angulate; other characters much as in C. erinaceus

Length 61 millim

Hab Burma; Pegu Hills (Bingham)

This and C. ermaceus were placed by Handlirsch as one species; but Sharp subsequently figured his C. binghami, and left no room for misunderstanding.

- B Scutellum with lateral margins sinuate, apex much narrowed, abdomen only moderately angulate.
- 927. Carcinocoris erinaceus, *Handl Verh z -b Ges Wien*, xlvii, p 26 (1897), *Dist A M N. H* (7) ix, p 357 (1902).

 Carcinocoris binghami, pt, *Handl Ann Hofmus Wien*, xii, p. 221; t vi, f 2, t ix, ff 61, 62 (1897)

Pale ochraceous; scutellum narrow, not reaching abdominal apex, sinuately narrowed from a little beyond base to about middle, with a central longitudinal ridge, which, with the lateral margins, is somewhat longly spinous; head, antennæ (excluding apical joint), and anterior lobe of pronotum with long erect spines, posterior pronotal lobe coarsely granulate, with two central diverging carinations, the margins and lateral angles longly spinous, margins of abdomen longly spinous, legs more or less longly spinous

Length 6 to 7; breadth between pronotal angles 3 milim.

Hab. Burma; Karennee (Fea).

C Scutellum with lateral margins nearly straight, moderately narrowed at apex, abdomen strongly dilated, angulate and sinuate.

928 Carcinocoris castetsi, Handl Verh z-b Ges Wien, xlv11, p 26 (1897), id Ann Hofmus. Wien, x11, p. 220, t v1, f 1, t 1x, ff 59, 60 (1897)

This species may be recognized by its dilated and obtusely angulate abdomen, which has its margins strongly spined and sinuately narrowed beyond the broad central maximum angulation, where it is broadly fuscous, it also possesses two more smaller transverse fuscous spots near apex, the scutellum has the lateral margins nearly parallel, but distinctly narrowed at apex, which is somewhat truncate, its base fuscous, head, pronotum, and antennæ spined, as usual in the genus, but with the two transverse carinations to the posterior pronotal lobe also somewhat closely spinous

Length 7 to 8 millim.

Hab Palni Hills, Trichinopoly (fide Handlirsch)

ARADIDÆ 153

Family ARADIDÆ.

The insects belonging to this family are flat and broad, of dull sombre coloration; the anterior legs are inserted on the disk of the prosternum; occili none, antennæ four-jointed; hemelytra possessing both corium and membrane; tarsi with two joints

The Aradidæ are found under and in decaying bark and on fungi attached to the same, their peculiar structure being adapted to that mode of life. In colour they are all of sombre hue, mostly black or of some ferruginous tint. We may still expect many species to be discovered in British India, though Sign. Fea has added much to our knowledge by the collections he made in Burma, collections which have already been worked out by Dr. Bergroth. The types of these species have, by the kindness of Dr. Gestro of the Genoa Museum, passed through my hands, and many of them are here figured. These insects undoubtedly assist in the disintegration of trees and shrubs, though it is probable that they make no attack before some amount of decay has set in.

The Aradidæ have been divided into two subfamilies

Synopsis of Subfamilies.

A Sternum distinctly sulcated; rostrum reaching or passing base of prosternum. Are

Aradınæ.

B. Sternum seldom sulcated; rostrum short, rarely passing base of head

Brachyrhynchina.

Subfamily I. ARADINÆ.

This subfamily has been hitherto restricted to the genus Anadus, but I have also included in it the genus Eumenotes, which possesses both a long rostrum and sulcated sternum. If Eumenotes is not placed in the Aradinæ, it should form the type of a new subfamily, Bergroth, who redescribed it under the synonym Odonia, placed it in the Brachyrhynchinæ, but he apparently overlooked the sulcated steinum, which is not mentioned in his diagnosis

Synopsis of Genera

A Head as long as broad, or longer, with the apical process tumescent, not bilobate .

ARADUS, p 153

B Head considerably broader than long, anteriorly bilobate

EUMFNOTES, p 155.

Genus ARADUS.

Aradus, pt , Fabi Syst Rhyng p 116 (1803) , Fiebei , Eur Hem pp 34 & 110 (1861) , Stäl, En Hem in, p 135 (1873) Piestosoma, Lap Ess Hém p 53 (1832) Subg Quilnus, Stäl, En Hem in, p 137 (1873)

Type, A versicolor, Herr.-Schuff, a Palæarctic species

Distribution. Universally distributed.

Head with the apical process tumescent, antennæ with the first joint short, incrassate, its base finely stylated; sternum distinctly sulcated; rostrum reaching or passing the base of the prosternum

Aradus abnormis, Beigi Ann Mus Civ Gen. xxvii, p 730, pl x11, ff 1, 2 (1889)



Aradus almormis

Male elongate, parallel, female elongately oval, black, opaque, pronotum sixcarmate.

Male, genital segment with long lobes extending considerably beyond the apex of

the abdomen, as shown in figure

Head longer than broad, spines at antenniferous tubercles long and prominent, antennæ black, with the second joint about four times as long as the first third joint gradually thickened from base to apex, rostrum extending beyond the base of the prosternum, pronotum with anterior margin a little broader than base of head with eyes, lateral margins crenulate, disk with

six carinæ, parallel, the outermest shortest, scutellum elongate, subtriangular, lateral margius elevated, anterior disk granulate, posterior area transversely rugulose; hemelytra a little shorter than the abdomen, at base a little laterally ampliated; legs dark

fuscous, tibiæ medially much paler.

Length, of 5½, 2 6½ millim Hab Tenasserim, Thagata (Fea)

930 Aradus candidatus, Beigi Ann Mus. Civ Gen xxvii p 732, pl x11. f 3 (1889)

Oblong-ovate, opaque, dark fuscous; antennæ, hemelytra, and posterior angles of the segments to connexivum much paler;

pronotum six-carinate

Head longer than broad, spines at antenniferous tubercles long, not toothed; antennæ with the basal joint black, remaining joints pale brownish-ochraceous, pronotum with the lateral margins entire, not crenulate, distinctly concavely sinuate, the base before scutellum moderately concavely sinuate, disk with six carinations, the two central with their apices moderately incressated, the next on each side of these with their apices hooked or curved, outermost shortest; scutellum trangular, laterally elevated, near base obtusely centrally elevated, hemelytra a little shorter than abdomen, membrane silvery white.

Length, of 4½ to 5, 9 4½ millim

Hab Tenasserim, Thagata, Plapoo (Fea).

931 Aradus mirabilis, Bergr. Ann. Mus Civ. Gen xxxii, p 710 (1892)



Fig 113 4radus mirabilis

Ovate, piceous; third joint of antennæ (excluding base), base of iostrum, anterior margin and spines of pronotum, apices of lateral marginal spines, apical area of the scutellum, basal area and transverse veins to corium, subcallous inner maiginal area to connexivum, obscure granulations to outer area of connexivum, anterior margin of prosternum, and lateral abdominal margins more or less pale ochraceous, legs fuscous, tibiæ annulated with luteous near base and at apex, lateral margins of the pronotum strongly produced and outwardly spinous; lateral margins of abdomen very strongly angulately produced

Length, Q, 94 millim

Hab Burma, Karennee (Fea)

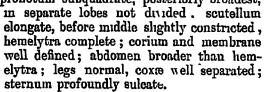
I have followed Bergroth in placing this species in the genus Aradus, though it can scarcely be considered congeneric

Genus EUMENOTES.

Eumenotes, Westw T E Soc 1v, p 246 (1847), Voll Faun Ind. Néerl 111, p 49 (1868). Odonia, Bergi Ann Mus. Civ. Gen xxvii, p 733 (1889)

Type, E obscura, Westw Distribution Oriental Region

Oblong, subovate, beneath moderately convex; head transverse, much broader than long, with eyes slightly narrower than the anterior margin of the pronotum, anteriorly bilobate, armed with a strong porrect spine in front of eyes; rostrum long, reaching the intermediate coxe, pronotum subquadrate, posteriorly broadest,



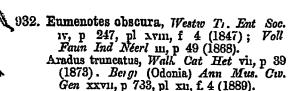


Fig 114
Eumenotes obscura

Fuscous, antennæ compressed, somewhat erectly setulose, first joint slightly passing apex, second distinctly longer than third, third and fourth joints

almost subequal; pronotum with the lateral margins medially impressed, discal surface irregular, some nodules on anterior area and a small nodule at each lateral angle; apex of corium rounded, legs somewhat erectly setulose

Length 9½ millim

Hab Sikhim, Mungphu (Atkinson). Burma, Karennee (Fea). -Described from Penang, also found in Borneo and other islands of the Malayan Archipelago

Subfamily II. BRACHYRHYNCHINÆ.

The short rostrum is the principal characteristic of this subfamily, which includes by far the largest number of the genera and species of Aradidæ In the species of some genera a sulcation of the sternum is found, but this is not combined with a long 10strum, and the divisional character is maintained.

Stal has divided the subfamily into two divisions, but as only one is found in this fauna, they need not be considered here

Synopsis of Genera.

A Scutellum more or less triangular, fourth joint of antennæ not, or very rarely, longer than the third, generally shorter

a Abdomen convex beneath

a Base of pronotum truncate, not sınuate

b Base of pronotum sinuate before base of scutellum, or with its lateral angles lobate or sublobate a' Venus of membrane distinct, or

at least discernible

a2 Head narrowed behind eyes, but there neither laterally tumid nor spinous

b2 Head spinous or dentiform on each side behind eyes

b' Veins of membrane indiscernible b Abdomen depressed and flattened beneath

B Scutellum broadly posteriorly rounded, fourth joint of antennæ longer than third, abdomen depressed and flattened beneath

CARVENTUS, p 156

ARTABANUS, p 157

Brachyrhynchus, p 159 Pictinus, p 163

NEUROCTENUS, p 164.

ANEURUS, p 166

Genus CARVENTUS.

Carrentus, Stal, Hem Afr m, p 32 (1865), id En Hem m, p 139 (1873) Acorium, Sign' Ann Mus Civ Gen xv, p 540 (1880)

Type, C denticollis, Stal, from the Papuan Region. Distribution Oriental, Papuan, and Neotropical Regions Pronotum either moderately or not dilated, broadest posteriorly, the lateral margins medially more or less prominently dentated, first joint of the antenna incrassate, passing the anterior process of head, longer than the second; hemelytra with corium and membrane almost indefinable; lateral margins of abdomen not prominently dilated, but with the segmental angles prominent, pronotum with a distinct anterior collar, the anterior portion of lateral margins somewhat truncately lobately produced, posterior margin truncate.

933. Carventus gestroi, Bergr Ann. Mus. Civ Gen xxxii, p. 712 (1892).

Head, antennæ, pronotum, scutellum, body beneath, and legs fuscous; pronotal lateral margins somewhat obscurely ochraceous; hemelytra and connexivum dull pale ochraceous; hemelytra,

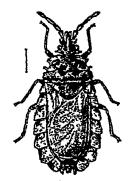


Fig 115 — Carventus gestroi

excluding basal area, and segmental margins to connexivum tinged with obscure pale castaneous; lateral margins of abdomen beneath narrowly coloured as connexivum above; legs fuscous, extreme apices of femora and the tibiæ a little paler.

Length 51 millim.

Hab. Burma, Karennee (Fea)

Genus ARTABANUS.

Artabanus, Stål, Hem Afr. m, p 31 (1815); id. Öfv Vet-Ak. Förh 1870, p. 672, id En. Hem m, p 139 (1873).

Type, A. geniculatus, Stäl, from the Philippines. Distribution. Oriental and Papuan Regions

Pronotum at base on each side before scutellum a little sinuate, or before basal angles of scutellum a little lobate, lateral margins straight or medially unisinuate; scutellum with a longitudinal rugosity; hemelytra with the corium and membrane well defined, membranal veins distinct; antennæ with the first joint considerably shorter than the third, head narrowed behind eyes, and there neither laterally tumid nor spinose.

A. Apex of anterior process of head moderately uncesed; corrum considerably longer than scutellum.

934 Artabanus breviscutum, Bergr Ann Mus Civ. Gen xxvii, p 735, pl xii, f 6 (1889)



Fig 116
At tabanus brevisculum

Fuscous-brown, head unarmed, the antenniferous tubercles obtusely angulately prominent, but not spinous; anterior process of head with its apex moderately incised; antennæ short, grevish pilose, first joint strongly incrassate, the second shorter and much less incrassate, apical joint moderately clavate, pronotum granulate, scutellum short, triangular, medially obtusely elevated; hemelytra shorter than abdomen, corium considerably longer than scutellum, its apical marginal straight, membrane fuscous, its basal marginal area much paler; legs greyishly setulose; femora granulate

Length, Q, 6½ millim

Hab Tenasserim, Plapoo (Fea)

935 Artaban's setulosus, Bergi Ann Mus Civ Gen. xxxii, p. 713 (1892)

Q Oblong, ovate, shortly setulose, piceous, head much longer than broad, the apical process not reaching middle of first antennal joint, apex moderately incised; antennæ granulate, setulose, second joint only about half the length of first, pronotum granulate, anteriorly prominently narrowed, apex concavely sinuate, anterior lobe quadrituberculate, posterior lobe a little longer than anterior lobe, hemelytra reaching the base of the apical abdominal segments; corium very much longer than the scutellum, its apical margin medially rounded; membrane fuscous, abdomen much broader than the hemelytra, femora granulate

Length, 2,9½ millim. Hab. Burma; Karennee (Fea).

936. Artabanus sexspinosus, Beigr Ann Mus Civ Gen xxxii, p 714 (1892)

d Elongate, or (2) elongately ovate, shortly pilose, piceous, head a little longer than broad, apex of anterior process not or scarcely incised, antennæ as in A stallosus, but a little thicker and shorter, pronotum sparingly granulate, narrowed anteriorly, lobes subequal in length, anterior lobe medially strongly sulcated, on each lateral area obtusely tuberculate, lateral margins concavely unismuste, with a porrect tubercle on the margins of both lobes, scutellum medially carinate, hemelytra passing the base of ultimate abdominal segment; corium very little longer than scutellum, its

apical margin straight, femora armed with a long spine before apex.

Length 8½ millim.

Hab Burma; Palon, Karennee (Fea).

- B Apex of anterior process of head bifurcate; corium not much longer than scutellum.
- 937. Artabanus excelsus, Bergr Ann Mus Civ Gen xxxii, pp. 713, 806 (1892), id Ent Tidskr xv, p 102 (1894).
- Q. Oblong, ovate, shortly pilose, piceous; membrane black, head distinctly longer than broad, apex of anterior process distinctly bifurcate; antennæ with the second joint a little shorter than the first, third about twice the length of the second, pronotum a little broader posteriorly than anteriorly, anterior lobe with a transverse series of four prominent tubercles, lateral margins strongly medially sinuate, the lateral angles rounded; scutellum medially carinate; hemelytra reaching the base of the apical abdominal segment; legs shortly pilose, femora finely granulate.

Length 9½ to 10 millim

Hab. Burma; Karennee (Fea) —Also recorded from the island of Engano

938. Artabanus bilobiceps, Leth (Brachyrhynchus) Ann. Mus Cw. Gen xxvi, p. 464 (1888) Artabanus atkinsoni, Bergr. Ann Mus Cw Gen. xxvii, p 734, pl xii, f 5 (1889)

Elongate, fuscous or ferruginous, tibiæ and tarsi paler; second, fourth, fifth, and sixth segments of connexivum with a large ochraceous spot; membrane piceous, its basal area luteous, head, pronotum, veins to corium and the femora granulate, head with the apex of the anterior process furcate; antennæ with the first joint much longer than the second, third about three times longer than second; pronotum distinctly transversely impressed, anterior area quadrituberculate, lateral margins profoundly unisimuate, lateral-angles rounded.

Length, of 6½, ♀ 7 millim.

Hab. Tenasserim, Thagata (Fca).—Sumatra (fide Lethierry)

Genus BRACHYRHYNCHUS.

Brachyrhynchus, Lap Ess Hem p 54 (1832), Amy. & Serv Hem p. 304 (1843), Stäl, Hem Afr 111, p 32 (1865); id En. Hem iii, p 140 (1873)

p 140 (1873) Mezira, Amy & Serv Hem p 805 (1843); Bergr Wien ent Zeit iv, p 181 (1885)

Dunus, Bergr Ent Tidski xv, p 104 (1894)

Subg Arictus, Stal, Hem Afr. 111, p 31 (1865); En Hem. in, p 144 (1873)

Type, B. membranaceus, Fabr.

Distribution. Universally distributed.

Body narrowly ovate or oblong, head behind eyes narrowly compressed and armed on each side with a very prominent tooth or spine, anterior process long, antenniferous tubercles prominently spinous; rostrum short, antennæ short, first joint scarcely passing apex of head, second joint almost subequal in length, pronotum transverse, near middle transversely impressed, lateral margins more or less sinuate, posterior margin more or less sinuate before scutellum, scutellum triangular; hemelytra with the corium much longer than the scutellum, membrane with numerous veins which more or less anastomose.

A Pronotum profoundly sinuate before base of scutellum.

Brachyrhynchus feanus, Bergi. Ann Mus Cw Gen. XXVII, 939 p 737, pl xii, f 8 (1889)

Dark, sometimes pale fuscous; membrane, body beneath and



Fig 117 -Brachy-Thynchus feanus

femora black; apex of fourth joint of antennæ ochraceous, head broad, broader than long, apex of anterior process emarginate, postocular dentate processes obtuse, extending far beyond eyes; rostrum passing base of head and almost reaching anterior coxm; pronotum profoundly sinuated at posterior margin before the base of scutellum, anterior area with four unequal and irregular callosities, scutellum with the apex obtuse, hemelytra not extending beyond the penultimate abdominal segment, apical margin of cornum straight, abdomen much broader than hemelytra

Length, o 10, 2 112 millim.

Hab. Sikhim, Mungphu (Atkinson). Burma; Kakhyen Kauri, near Bhamo (Fea).

940. Brachyrhynchus membranaceus, Fabr (Aradus) Syst Rhyng. p 118 (1803); Stål, Hem Fabr 1, p. 96 (1868)
Var albipennis, Fabr Syst Rhyng p 118 (1803).
Var. orientalis, Lap Ess Hlm p 54 (1832)
Crimia nigra, Dohrn, Stett ent Zeut. xxi, p 406 (1860)
Aradus lugubris, Boisd Voy. 'Astrolabe', Ent 11. p 642, pl xi, f 24 (1835) Var nasutus, Stal, Ofv Vet -Ah Forh 1870, p 673

Piceous or dark fuscous-brown; head with the apex of the anterior process moderately emerginate, antennæ very robust, granulate, first, second, and third joints almost subequal in length, fourth joint shortest, conical, its apex ochraceous, pronotum with four large irregular tubercles on the anterior area, posterior area sparingly granulate, lateral margins sinuate at transverse impression, posterior margin profoundly sinuate before base of scutellum, scutellum triangular, granulate, with a somewhat obscure central longitudinal rugosity, corium considerably longer than scutellum, granulate, the veins and margins rugose, membrane reaching or just passing the base of the last abdominal segment; abdomen much wider than hemelytra; tar-1 and rostrum dark castaneous

Var. Membrane ochraceous, with its basal area piceous.

Length 9 to 12 millim

Hab. Assam, Khási Hills (Chennell), Margherita (Doherty). Sikhim, Mungphu (Atkinson) Ceylon (Green), Burma; Palon, Karennee (Fea). Tenasserim; Meetan, Mt. Mooleyit (Fea).—Found throughout the Malay Peninsula and Malayan Archipelago.

941. Brachyrhynchus triangulus, Beigi Ann Mus Civ Gen xxvii, p 736, pl xii, f 7 (1889), id Ent Tidskr xv, p 107 (1894) Brachyrhynchus membranaceus, var triangularis, Leth & Sev Cat Gen. Hem ni, p. 43 (1896)

Closely allied to the preceding species, B. membranaceus, but differing principally by the lateral margins of the sixth abdominal segment being sinuate, somewhat rectangularly excavate, the pronotum is also relatively narrower than in B. membranaceus.

Length, 3, 10 millim

Hab Burma, Teinzo (Fea). Ceylon, Kurunegalla (Green)

Perak (Coll Dist)

Dr. Bergroth informs me that although the males are easily distinguished from *B membianaceus*, the females are only to be separated by a difference of genital segments

- B Pronotum only moderately sinuate before base of scutellum
 - a Anterior angles of pronotum not lobately produced.
- 942 Brachyrhynchus lateralis, Walk (Crimia) Cat Het vii, p 14 (1893), Dist (Neuroctenus) A M N H (7) ix, p 360 (1902)

Brachyrhynchus montanus, Beigi Ann Mus Civ Gen xxvii, p 738 (1889)

Piceous, tinged with obscure brownish-ochraceous, which is most prominent at base of head, the callosities and lateral angles of pronotum, and the basal tubercles of scutcilium; apex of fourth joint of antennæ, interior margin of membrane, posterior margins of segments to connexivum, and bases of tibiæ ochraceous; apex of anterior process to head emarginate, postocular dentate processes not passing eyes, anterior area of pronotum with four callosities, scutcilium transversely strigose, with a central longitudinal rugose striation, and with a short elongate rugose tuberculous striation near each basal angle; hemelytra not reaching the genital segment; corium much longer than scutcilium, its apical margin profoundly sinuated; abdomen much broader than hemelytra; femora strongly granulate.

Length 6 to 81 millim

Hab Cevion (Templeton). Burma; Karennee (Fea) Tenasserin Mt Mooleyit (Fea).

b. Anterior angles of pronotum lobately produced.

943. Brachyrhynchus tagalicus, Stál (Arictus), Öfv Vet-Al Förk 1870, p 672, Bergr Verh z-b Ges Wien, xxxvi, p 59, pl. u, ff. 5 & 7 (1886)

Brownish-fuscous, antennæ with the second and fourth joints smallest and subequal in length, third longest, fourth stoutest, pronotum with the lateral margins strongly sinuate at transverse impression, coarsely shortly setose, the lateral marginal area of the anterior lobe somewhat lobately produced and rounded, anterior lobe obscurely tuberculous, posterior lobe sparingly coarsely granulate, posterior margin moderately sinuate before base of scutellum, hemelytra much narrowed posteriorly, lobately produced at basal margin; corium considerably longer than scutellum, with a curved transverse vein near apex of scutellum, its apical area somewhat ochraceous, membrane not quite reaching sixth abdominal segment, its veins very distinct and piceous, abdomen very much broader than hemelytra, its lateral areas rugose and excavate

Length 8½ to 9 millim.

Hab Burma, Palon, Temzo, Katha (Fea) —Philippines, Java,

Nias Island

944 Brachyrhynchus tenericornis, Bergi Ann Mus Civ Gen xxxii, p 715 (1892)

Ovate, brownish-fuscous, the abdominal incisures flavous, head long, the apex of the anterior process broadened and incised, antennal spines diverging, postocular processes suberect, just passing the eyes, antennæ with the basal joint reaching the apex of the head, second and third subequal, fourth short, fusiform, pronotum laterally near middle very strongly incised, anterior lobe shorter than posterior, anterior angle lobately and obliquely produced, the disk with four callosities, of which the central two are rounded and much the largest, posterior lobe with its basal margin moderately concavely sinuate before base of scutellum, scutellum centrally carinate and with a shorter carination near each basal angle; corium much longer than scutellum, membrane not reaching apex of abdomen: pale piceous, veins darker

Length, d and Q, 9 millim Hab. Burma; Karennes (Fea).

945. Brachyrhynchus undulatus, Bergr Ann Soc Ent Belg. xxxvi, 'p 504 (1892).

Oblong, ovate, piceous-brown, head a little longer than broad, anterior process slightly passing the middle of the first autenual joint, antenniferous spines acute; pronotum about twice as broad as long, basal margin nearly straight, lateral margins crenulate, sinuate before middle, apical angles porrectly and lobately produced,

medially transversely impressed, anterior lobe with four callosities, the two external very obsolete; hemelytra almost reaching the genital segment; corium much longer than the scutellum and about reaching the apex of the second segment of connexivum, apical angle rounded, apical margin near middle subangulate; membrane reticulate; margins of abdomen moderately undulate or angulate at incisures, legs erectly pilose, antennæ with the first joint erectly pilose, remaining joints mutilated in type.

Length 81 millim

Hab Sikhim; Kurseong (Brussels Mus)

I am indebted to Mon. Severin for an opportunity of describing and comparing Bergroth's typical specimen.

Genus BICTINUS.

Pictinus, Stal, En Hem. in, pp 140 & 145 (1873)

Type, P. cinctipes, Stal, a Neotropical species

Distribution. Nearctic, Neotropical, Oriental, and Papuan

Regions.

This genus can at once be distinguished by the obliterated or indiscernible veins to the membrane, and by the somewhat convexly truncate posterior margin of the pronotum.

946. Pictinus asiaticus, Bergr Ann Mus. Civ Gen xxxii, p. 716 (1892)



Fig 118
Protinus asiaticus

Castaneous; membrane pale hyalme; antennæ robust, first joint incrassate, longer than second, third considerably longer than second, fourth fusiform; pronotum distinctly transversely impressed, anterior lobe shorter than posterior, posterior lobe medially impressed, lateral margins distinctly, broadly reflexed; scutellum broader than long, coarsely punctate, centrally carinate; hemelytra a little shorter than abdomen; corrum a little longer than scutellum, its apical margin straight; abdomen a little broader than hemelytra, its lateral margins strongly upwardly reflexed

Length 3½ millim. Hab Burma, Karennee (Fea)

947 Pictinus verrucicollis, Walk (Crima) Cat Het. vii, p 18 (1873);
Dist A. M. N. H (7) ix, p 360 (1902)

Ferruginous-brown, finely granular; anterior angles and lateral margins of pronotum, large spots to the connexivum above and beneath, apices of femora, the tibia and tarsi ochraceous; antennæ with the apices of second and fourth joints ochraceous, first joint

very slightly longer than second, fourth fusiform and setose, anterior process of head with its apex slightly emarginate and about reaching end of first antennal joint, spines in front of eyes prominent and oblique; pronotum with the anterior lobe strongly concavely sinuate at lateral margins, and armed on disk with two prominent tubercles, the anterior angles of both lobes obtusely spinous, posterior lobe with an obscure transverse broken waved rugose line; scutellum with a central lugose carination; apical margin of corium strongly sinuate; membrane paler and reaching base of apical abdominal segment

Length 6½ millim

Hab. Ceylon (Brit Mus.).

Genus NEUROCTENUS.

Neuroctenus, Fieber, Eur Hem p 34 (1861), Stål, En Hem in, p 140 (1873)

Mezire, part, Sill, Hem. Afr. 111, pp. 31 & 35 (1865) Synopsis generis, Bergr Ofv Finska Vet Soc Forh xxix, p. 173 (1887)

Type, N. caffer, Stal, an Ethiopian species

Distribution Nearctic, Neotropical, Ethiopian, Oriental, and

Australasian Regions

This and the following genus (Aneurus) may be distinguished from all the preceding genera by the flattened body, principally caused by the greatly depressed abdomen beneath, the scutellum is triangular; the fourth joint of the antennæ is rarely longer than the third.

948. Neuroctenus par, Bergi Ofv Finska Vet Soc. Forh XXIX, p 180 (1887) Crimia rubrescens, part, Wall. Cat Het vii, p 14 (1873)

Elongately ovate, slightly granulate, opaque, piceous; abdomen



Fig 119 Neuroclenus par

and legs brownish-piceous, disk of abdomen beneath flavescent, antenne with the first and second joints subequal in length, third slightly longer than second, fourth subequal to or a little shorter than second, postocular dentiform process passing eyes, pionotum medially impressed; anterior lateral angles rounded, corium with the apicul maigin bisinuate; membrane with a metallic lustre, base and internal angle luteous.

Var. As here figured, disk of anterior process to head, antennæ, anterior and lateral margins to pronotum, upper surface of abdomen

and legs testaceous

Length 6 to 8 millim.

Hab Burma; Bhamo, Teinzo, Karennee (Fea) Tenasserim,

Thagata, Plapoo (Fea), Victoria Point (Atkinson)—Originally
described from Java; Siam (Brit. Mus)

949. Neuroctenus affinis, sp n

Allied to N. par, Bergr, but smaller, anterior process of head about reaching apex of basal joint of antennæ, of which the first and second joints are subequal, third longer than second, fourth about subequal to second, postocular dentiform process not passing eyes; lateral margins of pronotum not rounded anteriorly.

Length 6 millim.

Hab. Dehra Dun (Stebbing) — Found in decaying Sal wood (Shorea robusta)

I have seen a very long series of this species, and it is constant both in size and structure

950 Neuroctenus serrulatus, Stâl, Öfv Vet -Ak. Forh 1870, p 674;

Beigr Öfv Finska Vet Soc Forh xxix, p. 179 (1887).

Crimia rubrescens, part., Wall. Cat Het vii, p 14 (1873)

Brownish-testaceous; hemelytra with the corium pale stramineous, the membrane pale byaline; head with the anterior process reaching or slightly passing the apex of the first joint of the antenne, its anterior margin moderately incised; antenne with the basal joint globose and about subequal to second, third slightly longer than second; pronotum with a distinct transverse impression, the anterior area obscurely excavately impressed, lateral margins of both lobes a little convexly rounded; membrane reaching the base of the sixth abdominal segment, femora coarsely granulose; lateral margins of pronotum and abdomen very finely serrulate

Length 6½ millim

Hab. Ceylon (Lewis). Tenasserim; Victoria Point (Alkinson) — Also recorded from Java and the Philippines.

951. Neuroctenus nitidulus, Bergr Öfv Finska Vet Soc Forh. xxix, p 177 (1887), 1d Ent. Tidski xv, p 113 (1894)

Elongate, a little dilated posteriorly, shining, piceous, abdomen beneath fulvous; antennæ with the second joint a little shorter than the third, fourth nearly twice as long as second, spines near bases of antennæ short, obtuse, postocular dentiform processes obtuse, minute, not passing eyes; anterior process to head equal in length to first joint of antennæ, its apex emarginate; pronotum unequal, laterally moderately sinuate, angles subcallous; scutellum rugose; corium longer than scutellum, its apical angle acute, subacuminate; membrane shining fuscous, its base narrowly and obsoletely luteous; femora denticulated beneath.

Length 6 millim.

Hab Burma (Stockholm Mus)

I have not seen this species

Note—Neurocienus rubrescens, Walk (Crimia) Cat Het vii, p 14 (1873) A number of species were included by Walker under this name. The first on the list, from Hindostan, is not to be found, that from Ceylon =serrulatus, Stäl, and does not agree with Walker's description. The third, from Siam, =N par, Bergr. The specimens from Singapore, Sarawak, and Aru, I take to be typical rubrescens, Walk., agreeing with the description.

Genus ANEURUS

Aneurus, Curtis, Brit Ent 11, p 86 (1825), Freb Eur. Hem. pp 35 & 116 (1861), Stell, En Hem. 11. p 140 (1873).

Type, A lævis, Fabr, a Palæarctic species.

Distribution Almost universally distributed

Allied to Neuroctenus by the flattened, depressed body, but differing from it by the broadly rounded posterior margin of the scutellum and by the fourth joint of the anténnæ being longer than the third

952. Aneurus indicus, Bergr Anh Mus Civ. Gen xxxii, p 717 (1892)

Dark ferruginous or fuscous, disks of sternum and abdomen



Fig 120
Aneurus indicus

beneath paler; antennæ with the first joint incrassated, second and third subequal, fourth longer than third, pronotum with the anterior angles rounded, the lateral margins behind middle subdenticulately prominent (this is sometimes scarcely discernible, as in the specimen here figured), scutellum about as long as broad, with a central carination, cornum with a medial somewhat oblique ochraceous fascia; anterior process to head, apex of fourth antennal joint, disk of anterior pronotal lobe, abdomen above, and legs more or less castaneous

Length 3½ to 4 millim

Hab Burma; Karennee (Fea)

Family HEBRIDÆ.

A family consisting of very small insects, in which the body beneath is clothed with a silvery velvety pubescence and the antenne are five-jointed. Only three genera are at present known, and the number of recorded species is small, but this is perhaps more due to our want of knowledge, through imperfect collecting, than to a real paucity of the insects.

One genus only is at present known in British India

Genus HEBRUS

Hebrus, Cw tis, Ent. May 1 p 198 (1833); Amy & Serv Hém. p 294 (1843), Fieb Eur Hem. pp 32 & 104 (1861), Champ Biol Centr.-Amer., Phynch 11, p 117 (1898) Næogæus, Lap Ess Hém p 34 (1832)

Type, H. pusillus, Fall., a Palæarctic species

Distribution. Probably widely and generally distributed. As stated by Champion, the Palæarctic type has five-jointed antennæ, but Laporte and some other authors give the antennæ as four-jointed, the divisions between the fourth and fifth joints being very obscure, other writers, as Douglas and Scott, enumerate six joints, a minute jointlet at the base of the third being regarded by them as a true joint. The ventral sutures are sometimes indistinct or obsolete; tarsi of two joints

If a strict rule of priority were applied to this genus, it would be necessary to use Laporte's name; but *Hebrus* has been employed by all acknowledged authorities, and nothing could be gained, but much obscurity caused, by altering the name, a course which would also necessitate a fresh name for the family.

We now describe the first species known from British India.

953 Hebrus orientalis, sp. n

Ferruginous-brown, corium dull stramineous, with its apical

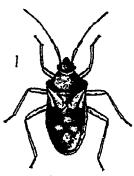


Fig 121 Hebrus orientalis

area piceous, inembrane fuscous, with its apical area piceous, inembrane fuscous, with four discal obscure greyish spots; antennæ, legs, connexivum, and lateral margins of abdomen beneath ochraceous; apices of the femora pale castaneous; legs coarsely granulate; head finely sulcate between the eyes; first joint of antennæ about as long as head, longer but not twice as long as second, pronotum with the lateral angles subprominent, inwardly distinctly sulcately impressed, scutellum with the apex broadly, angularly incised, under surface imperfectly seen owing to specimens being carded

Length 2½ millim. Hab. Burma; Karennee (Fea).

Family HYDROMETRIDÆ.

This family may be distinguished from the Hebridæ by the four-jointed antennæ, while, as in that family, the abdomen beneath is clothed with a silvery velvety pubescence. These insects are all aquatic or subaquatic. Some very distinct genera are included in the Hydrometridæ, which give to this group a heterogeneous appearance; but the family is still—as is shown particularly by the life and liabits of the species—a natural one. It is divided into four subfamilies, all of which are represented in British India.

Champion (Biol. Centr.-Amei, Rhynch 11, p 123) has included Mesovelia in the Hebridæ, as had formerly Dr. Puton; but such a position for the genus is not generally accepted and is not followed here.

Synopsis of Subfamilies *

Mesovelina
Hydrometrinæ
Velunæ.
Gerrinæ

Subfamily I. MESOVELIINÆ

This subfamily is represented by a single genus, and is somewhat generally distributed, but not yet recorded from the Ethiopian Region. According to Sahlberg, Mesoveha frequents the leaves of Nymphæa, Potamogeton, &c.

Genus MESOVELIA.

Mesovelia, Muls. & Rey, Ann Soc Lann Lyon, 1852, p 138, Fieber, Eur Hem pp 33 & 105 (1861), Sahlb Not Faun. Fin Fenn XIV, p 259 (1875), Saund Hem Het Brit Islds p 145 (1892).

Fieberia, Jakoul Hoi, Soc Ent Ross VII, p 32 (1873)

Type, M. furcata, Muls & Rey, a Palæarctic species

^{*} I have here very largely followed the synoptical characters so clearly given by E Saunders (Hem Het Brit Islds p 144, 1892)

Distribution Recorded from the Palæarctic, Nearctic, Neotropical, and Oriental Regions, but probably still more widely distributed.

Elongate, hemelytra not always fully developed, head with the eyes large and almost touching anterior margin of pronotum, ocelli about equally distant from eyes as from each other, antenniferous tubercles well developed; antennæ four-jointed, rostrum reaching the interinediate coxæ, pronotum with the lateral angles somewhat tuberculously subprominent, its posterior margin a little sinuate—scutellum large, its apex somewhat broadly truncate, corium with very robust renation. clarus submembranous, legs long and slender, tarsi three-jointed.

954 Mesovelia mulsanti, Buch White, Tr E S 1879 p 268, Champ Biol Centr-Am, Rhynch n, p 123, pl vin, ff. 10 & 11 (1898)

Mesovelia bisignata, Uhler, in Kingsley's Stand Nat Hist n, p 273, f 324 (1884), id Proc Zool Soc 1893, p 703 Mesovelia orientalis, Kirk Ann Mus Cir Gen xl, p 808 (1900)

Strammeous or pale luteous; extreme apices of the antennal joints, posteriol area of the pronotum, lateral margins of

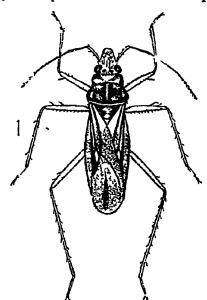


Fig 122 -Mesovelia mul-ante

the scutcilum, and veins to corium fuscous, corium exhibiting a pale discal cell at apical margin; membrane pale hyaline, with an opalescent tint, body beneath finely greyishly pubescent; apices of the tarsi piceous, the eyes are usually piceous, but in the type of Kirkaldy's Sumatran orientalis they are pale brownish; first, third and fourth joints of the antennæ subequal in length, second joint shortest. tibiæ longly hirsute, intermediate femora armed with fine spinules beneath

Length 2½ to 3 millim. Hab Ceylon, Peradeniya, Tangalla (Green) — Sumatra (Beccari), also found in North and Central America, and in the Antilles.

I have been able to compare Kirkaldy's type and Green's Ceylon examples with the fine Neotropical series of specimens referred to in the 'Biol Centr-Amei.' and now contained in the British Museum

Subfamily II HYDROMETRINÆ.

A very distinct subfamily, containing one very widely distributed genus. Its extent and distribution are still most imperfectly known, as is evident by occasional descriptions of species from the most widely separated regions

Genus HYDROMETRA.

Hydrometra, Latr Piècis des caract gén des Ins p 86 (1796), Cuit Brit Ent 1, p 32 (1824), Stêl, Hem Afr. 111, p. 166 (1865), Saund Hem Het Bit Islds p 147 (1892) Limnobates, Burm Handb 11, p 210 (1835), Fieber, Eur Hem p 103 (1861)

Type, H stagnorum, Linn, a Palmarctic species.

Distribution. Probably almost universal

Very elongate and linear; head very long, much longer than pronotum, dilated anteriorly, eyes remote from anterior margin of pronotum, ocelli absent, antennæ slender, inserted near apex of head, rostrum a little shorter than head; pronotum long, more than twice as long as wide, scutellum scarcely visible, hemelytra shorter than the abdomen, sometimes undeveloped

The insects are found on the surface of water in sheltered situations and are of sluggish

955. Hydrometra vittata, Stal, Öfv Vet-Ak For h 1870, p 705, Dist. A M N H. (7) x1, pp 255-6 (1903) Limnobates albolineatus, Scott, A M N H. (4) xiv, p 447 (1874) Hydrometra green, Kirk Entomologist, 1898, p 2

Ferruginous, hemelytra and apices of the femora piceous; a slender central line extending through the postocular portion of the head and pronotum, a line at the lateral margins of the anterior area of the pronotum, and body beneath much paler, a line to clavus, a central longitudinal fascia to hemelytra (sometimes practically obsolete) white; length of head from eyes to apex nearly two and a third times greater than from eyes to base, hemelytra reaching the base of the fifth abdominal seg-

Fig 123 Hydrometra vittala

Length 11 to 12 millim Hab Bombay, Bor Ghat (Dixon) Ceylon (Green) Burma, Palon (Fea); Shan States, Taunggy1 (Thompson). Tenasserim; Houngdarau Valley (Fea) - Malay Peninsula, Pahang (Craddock) Philippines. Japan (Lewis)



Subfamily III. VELIINÆ

This subfamily is composed of insects having a somewhat common faces. They are aquatic in habits, and mostly frequent fresh water, but the genera Halovelia, Bergi, and Trochopus, Carp, are marine. The Vehine are almost universally distributed, but our knowledge of the genera and species is still incomplete.

Symoners of Genera.

A Anterior femora straight or nearly straight, not prominently curved in either sex.

a. Body elongate, antennæ long, with third and fourth joints moderately slender

a. Intermediate and posterior tarsi equal or subequal in length

b Intermediate tarsi longest

b. Body short, subovate, antennæ moderately short and stout

a Pronotum subangularly posteriorly produced .

b Pronotum convexly posteriorly duced .

B Anterior femora strongly curved in female, antennæ with third and fourth joints slender

Rhagovelia, p. 171. Velia, p 172

Microvelia, p 174.

Perittopus, p 175

Baptista, p 173

Genus RHAGOVELIA.

Rhagovelia, Mayr, Ve h zool-bot Ges Wien, 1865, p 445, Champ Biol Centr - Am, Rhynch 11, p 131 (1898)

Becula, Stål, Hem Afr 111, p 167 (1866)

Neovelia, Buch White, Journ Linn Soc, Zool. xiv, p 487

Type, R. nigricans, Burm, from the Southern Palearctic Region and Mascarene Islands.

Distribution Probably found in all the principal zoo-geographical

regions.

In the different diagnoses of this genus much confusion exists as to the estimation of the number of tarsal joints by different As Champion remarks, the genus is well characterized by the three-jointed tarsi, and the long, deeply-fissured, terminal joint of the intermediate tarsi. The same writer observes —"In this fissure there is a series of long ciliated hairs, arising from a common stem, which are probably extended, fan-like, when the insect moves about on the surface of the water; these hails are sometimes partly extended in dried specimens, but they are usually hidden within the fissure."

The Rhagovelia are found on the surface of fresh water.

956 Rhagovelia ravana, Kul Entomologist, 1902, p 64.

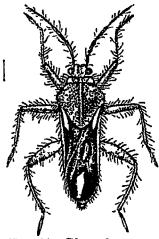


Fig 124 - Rhagovelia ravana

Brownish-black, head (more or less) and a central longitudinal line to pronotum ferruginous; antennæ unicolorous; a spot on each side of pronotum at anterior angles, and three spots to hemelytra, one at base, another in the central cell, and the third apical silvery-white; veins very distinct; femora more of less pallid, especially at bases and under surface, coxe and trochanters palled; connexivum with a broad inedian longitudinal pale flavous abdomen beneath dark fascia . brownish, ochraceously pilose, and somewhat pallid medianly.

Length 4 to 41 millim

Hab Ceylon, Peradeniya (Green).

By the favour of Mr. Kirkaldy I have been enabled to figure his type specimen.

Genus VELIA

Velia, Lati Gen in, p 132 (1807), Burm Handb ii, p 211 (1835), Amy & Serv Hem p 419 (1843), Fieber, Eur Hem pp 33, 105 (1861), Stäl, Hem Afr in, p 167 (1865), Saund Hem Het But Islds p 148 (1892)

Type, V currens, Fabr.

Distribution Nearctic, Neotropical, and Palearctic Regions,

just entering the Oriental.

Head short, eyes large and slightly separated from the anterior margin of the pronotum, ocelli absent, first joint of antennæ longest, curved, remaining joints subequal in length, rostrum extending to about the middle of the mesosternum, pronotum with the basal margin posteriorly convexly produced, hemelytra in the developed form entirely membranous, or in the undeveloped form entirely absent, connexioum reflexed, the apical segment produced in a dentate angulation, in the male two genital segments are visible above, in the female only one, intermediate femora long, slender, posterior femora incrassated, with two spines and a series of denticulations in the male; tarsi three-jointed, claws subapical, intermediate tarsi longest.

- 957 Velia currens, Fabr (Germs) Lnt Syst iv, p 193 (1794), id (Hydrometra) Syst Rhyng p 259 (1803), Amy & Serv Hem p 420 (1843), Freb Eur Hem p 105 (1861), Saund Hem Het But Islds p 149 (1892)
- Q. Dark chocolate-brown, abdomen above blackish-brown, connexivum brownish-ochraceous, spotted with black, antenna, rostium, legs and body beneath biownish-ochraceous, the last

with a broad piceous submarginal fascia, a spot on each side of

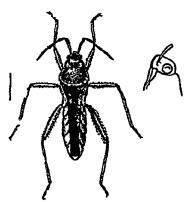


Fig 125 - Velia currens

an inscia, a spot on each side of anterior pronotal lobe, two spots on first, and sometimes a small spot on sixth abdominal segment dull silvery - white; pronotum with a distinct central longitudinal carmation.

Length 6 to 7 millim

Hab. Murree (Stoliczka, Ind. Mus.) — Widely distributed throughout the Palwarctic Region.

This species was collected by Dr. Stoliczka during the Second Yarkand Expedition, but was not included in the collection forwarded to this country and which

I worked out in 1879. The fully developed form is everywhere very rare. The immature insect is found commonly in streams, &c.

Genus BAPTISTA, nov.

Type, B. gestror, Dist Distribution. Burma.

Head subtriangular with a distinct central longitudinal ridge, eyes prominent; antenne with the first joint thickened, curved, almost as long as head, second joint less thickened, shorter, but more than half the length of first, third and fourth joints very slender, third longest, fourth much longer than first, all the joints very finely setose, pronotum with an obscure central carination, the lateral angles subprominent, auterior angles truncate behind eyes, anterior femora slightly curved in male, strongly curved in female, their apical areas thickened and obscurely toothed beneath near apices; body beneath imperfectly seen in carded specimens.

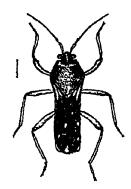


Fig 126
Baptista gestroi, Q

958. Baptista gestroi, sp n

Piceous, hemelytra black, with two oblique linear spots at base, five or six discal spots on posterior half and a spot at apex creamywhite; first and second joints of antennæ and the legs ochraceous, apices of temora and bases of tibiæ a little infuscated; lateral margins of the pronotum somewhat laminate and acute. femora very finely and obscurely hirsute beneath, in the female these hairs are more prominent and tufflike near apices of posterior femora, anterior femora much curved in female, very moderately so in male.

Length 3½ to 4 millim.

Hab. Burma, Karennee (Fea)

Genus MICROVELIA.

Microvelia, Westw Ann. Soc Ent Fr m, p 647 (1834), Amy & Serv Hêm p 421 (1843), Saund Hem Het Brit Ields p 150 (1892) Hydroessa, Burm Handb n, p 213 (1835), Fiebe, Eur Hem pp 33, 104 (1861), Still, Hem Afr. m, p 167 (1865)

Type, M pulchellu, an Antillean species.

Distribution Very widely, probably universally, distributed Head triangular, eyes very large, near to, sometimes touching, anterior maigin of pronotum, ocelli absent: antennæ with the basal joint incrassate, passing apex of head, second joint at apex about as thick as the first, rostrum reaching disk of mesosternum; pronotum with its basal margin angularly dilated and posteriorly produced, hemelytra submembranous, the veins thickened, connexivum reflexed; intermediate femora rather long, posterior



femora slightly incressate

Fig 127 Microvelia repentina

959. Microvelia repentina, sp n

Head, pronotum and body beneath piceous, anterior margin of pronotum, connexivum, antennæ and legs ochraceous, hemelytia creamy-white, reaching the apex of the abdomen, the veins dull ochraceous; first and second joints of antennæ subequal in length, pronotum with the lateral angles subprominent

Length 1½ millim
Hab Calcutta

960. Microvelia singalensis, Kirk Entomologist, xxxvi, p 180 (1908)

Head and pronotum piceous, lateral margins of head and anterior margin of pronotum silvery-grey; hemelytra bluish-grey with piceous venation, thus giving the appearance of bluish-grey spots, its apical area piceous with a distinct elongate apical bluish-grey spot, connexivum ochraceous, much upwardly reflexed, body beneath piceous with silvery-grey pubescence, legs and antennæ ochraceous; first and second joints of antennæ, apices of tibiæ, and the tarsi more or less infuscated, body distinctly narrowed posteriorly, pronotum with a distinct central longitudinal carination, its lateral angles obtusely subprominent, first and second joints of antennæ thickened, third and fourth slender and longest, fourth longer than third.

Length 13 millim

Hab. Ceylon; Pundaluoya, Gampola (Green).

Mr. Green kindly sent to me specimens of this species which were caught in an acetylene moth-trap

Genus PERITTOPUS.

Perittopus, Fieber, Lur Hem. p 33 (1861); Kuk Entomologist, 1901, p 286

Type, P. breddini, Kirk, a Javan species.

Distribution Oriental Region

Apterous form. Subovate; rostrum and antennæ short and stout; pronotum with a narrow anterior collar; anterior tarsi apparently single-jointed (two minute basal nodes or joints); intermediate and posterior tarsi distinctly three-jointed; claws inserted posterior to the apex, in a single cleft; connexivum well developed, broad.

961. Perittopus rufus.

Perittopus rufus, Fieb. (ined.) ?

Apterous form. Bright reddish-ochraceous; abdomen above a little darker; coxe and legs luteous; antennæ, apices of the

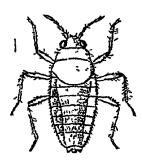


Fig 128 -Perittopus rufus

intermediate and posterior femora, bases and apices of all the tibise more or less fuscous; eyes piceous; ocelli obscure, situate near eyes, basal joint of antennæ incrassate, almost equal in length to second and third joints, fourth fusiform, slightly longest, rostrum just passing anterior coxe, its apex black; pronotum sparingly coarsely punctate, with a distinct transverse impression on anterior area; antennæ, lateral margins of pronotum and abdomen, apices of femora and the tibise hirsute

Length 2½ millim.

Hab. Tenasserim (Coll Dist) Stamese Malay States (Annandale & Robinson)

Subtamily IV. GERRINÆ

As previously defined (p. 168), in this subfamily of the Hydrometride the posterior femora are long and slender, extending far

beyond the abdominal apex.

These are all aquatic insects, and their anatomy, especially the structure and segments of the sternum, has been much misunderstood. It is not the province of these volumes to enter exhaustively on this subject, but Bergroth (Ent. Month. Mag. 1902, p. 258) has cleared up several misconceptions of previous writers.

The Gerrina have been subdivided by Bianchi into two divisions or, as he proposes, subfamilies, and although Champion considers the characters too unsatisfactory to be used, we do not accept that view, at least so far as this fauna is concerned, and we follow Bianchi's arrangement

Division GERRINARIA.

Subfam Gerridæ, Bianchi, Annuaire Mus St Pétersb 1896, p 70

Body comparatively long and narrow, length to breadth being at least 4:1 These are all freshwater insects and are widely distributed

Synopsis of Genera.

A Anterior tursi short, not nearly so long as

a. Eyes large, prominently exserted a Claws inserted before apex of taisus

b Claws inserted at apex of taisus

b Eyes not exserted, adpressed to head a' Intermediate and posterior legs each more than twice as long as body, rostrum reaching middle of mesosternum

b'. Body longer than half the length of either intermediate or posterior legs; rostrum scarcely or about reaching anterior coxe

B Anterior taisi nearly or about as long as the tibiæ, intermediate femola fringed in Ω with long hairs

Genris, p 176 Ectrechus, p 182

ONYCHOTRECHUS, p 182

[p 184 CYLINDROSTETHUS,

PTILOMERA, p. 185

Genus GERRIS

Gerris, Fabr Ent Syst iv, p 187 (1794), Amy & Serv Hem p 414 (1843), Swand Hem Het Brit Islds p 151 (1892) Hydrometra, Fabr Syst Rhyny p 256 (1803), Fieber, Eur Hem рр 33 & 106 (1861)

Aquarius, Schellenb Land- u Wasser w p 25 (1800)

Subg Tenagogonus, Stål, Öft Vet-Al. Fork v, p 263 (1853)

" Limnometra, Mayr. Reise Notara, Hem p 174 (1866)

" Limnogonus, Stål, He r Fabr 1, p 132 (1868)

" Limnotrechus, Stål, Corvette and Hygiotrechus, Stål, Ofv Vet-

Al Forh 1868, pp 396, 397

Lamprotrechus, Reut Ofv Finska Vet Soc Fork xxv, p 40 (1882)

Type, G lacustres, Linn, a Palmarctic species

Distribution Universally distributed

Head short, eyes large and prominent, ocelli absent; antenna with the first joint long, sometimes very long, rostrum short; pronotum elongate, posteriorly concavely produced, constricted anteriorly; hemelytra (sometimes absent) with the veins very prominent, anterior coxe considerably removed from the intermediate pair, intermediate and posterior coxe situate close together; intermediate and posterior femora and tibiæ long, then proportions variable in different species; tarsi two-jointed; claws emerging before apex.

A. Antennæ with the first and fourth joints longest; second joint shorter than third

962. Gerris fluviorum, Fabr Ent Syst Suppl p 543 (1798); id (Hydrometra) Syst Rhyng p. 257 (1803), Stat (Tenagogonus), Hem. Afr 111, p. 169 (1865), id (Lamnometra) Hem. Fabr 1, p 132 (1868)

Pale ochraceous, antennæ, apical joint of rostrum, central

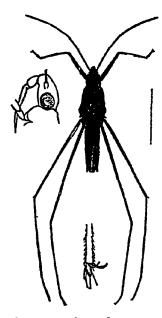


Fig 129 — Gerris fluviorum

longitudinal fascia to head, anteriorly ampliated, a narrow fascia on each side within eyes, sometimes produced and joining the central fascia, also a lateral spot near insertion of antennæ, sublateral line to pronotum, interiorly very much ampliated. and a central continuous line. a broad lateral margin to sternum, a broad fascia between anterior and intermediate coxe, coxal spots, two basal sublateral fasciæ to abdomen; the outermost longest, intermediate and posterior tibiæ and tarsi black: hemelytra fuscous, the veins black; posterior femora infuscated beyond middle; antennæ with the first and fourth joints longest and subequal in length, second distinctly shorter than third; rostrum considerably passing the anterior coxe, intermediate and posterior femora about equally long, apices of anterior and intermediate femora distinctly spined.

Length 11 to 12½ millim

Hab Pondicherry (Coll Sign) Bombay, Bor Ghát (Dixon)

Trivandrum (Brit Mus.).—Also recorded from Java and the Island of Bourbon

963 Gerris anadyomene, Kul Entomologist, 1901, p 117

Head and pronotum dull ochraceous, head with two central black lines emerging from a common stalk at base, and a black line before each eye, pronotum with a central, two sublateral and one subposterior lines black, the extreme margins pale luteous, henelytra fuscous, the veins apically darker; body beneath silvery-grey pubescent; head beneath, prosternum, apex of abdomen, acetabula and coxæ very pale ochraceous; a broken lateral line to sternum, a spot before intermediate acetabula, and two linear spots near intermediate coxæ black; legs and rostrum dull ochraceous, apex of rostrum black; antennæ obscure

pale fuscous, first, third and fourth joints longest and subequal, second shortest.

Length 12 millim.

Hab Ceylon; Pundaluoya (Green) -Philippine Islands (Simon).

964. Gerris gracilicornis, Horv (Limnotrechus) Ann. Soc Ent Belg xxii, p cix (1879) Gerris selma, Kirl Entomologist, xxxvi, p 181 (1903)

Brownish-ochraceous, head and anterior lobe of pronotum piceous; a small spot in front of eyes, lateral margins and a central tascia to anterior pronotal lobe brownish-ochraceous; body beneath greyishly pubescent, rostrum, acetabula, legs and apex of abdomen ochraceous, abdomen above piceous, the connexivum brownish-ochraceous; antennæ ochraceous, the third and fourth joints infuscated, basal joint longest, almost but not quite as long as second and third together; lateral angles of pronotum prominent Length 14 to 15 millim.

Hab Sikhim; Mungphu (Atkinson) Assam.—Japan, North China

965 Gerris mitida, Mayn (Hydrometra), Verh z-b Ges Wien, xv, p 443 (1865), id (Hydrometra) Reise Nov, Hem p 170, fig 51 (1866)

Head and pronotum black, shining; hemelytra piceous with a violaceous reflection, the veins black, head with two longitudinal lines above within eyes, and the under surface, rostrum (excluding apex), two small linear spots on anterior area and the lateral and posterior margins of pronotum, and the legs ochraceous, sternum and abdomen silvery-grey tinged with luteous, lateral areas of sternum, apex of rostrum, and abdominal spiracles black; lateral margins of abdomen ochraceous, antennæ with the first and second joints dull ochraceous, their extreme apices and the third and fourth joints fuscous; first ind fourth antennal joints subequal in length and longest, second and third shorter and almost subequal.

Leugth 6 to 8 millim

Hab Trivandrum (Brit. Mus.). Ceylon, Peradeniya (Green)

Burma, Rangoon (Fea).

B. Antennæ with the basal joint longest, second, third and fourth joints almost subequal

966. Gerris fossarum, Fabr. (Cimer) Syst Ent p 727(1775), id. (Cimex) Spec Ins. ii, p 375 (1781), id (Cimex) Mant Ins ii p 308 (1787), Stäl (Lamnogonus), Hem Fabr i, p 133 (1868) Gerris discolot, Stäl, Freg Eng Resa, Ins p 265 (1859), id (Lamnogonus) Ofv Vet-Al. Forh 1870, p. 705.

Ohvaceous-black, shining; a longitudinal line on each side of head within eyes, a spot on inner margin of eyes, lateral and GERRIS. 179

posterior margins, two small linear spots on anterior area, followed by a continuous central medial line, rostrum and legs pale ochraceous body beneath pale ochraceous, more or less covered with silvery-grey pubescence; a somewhat broken lateral fascia to sternum, hemelytra and tarsi piceous; antennæ dull ochraceous, apices of first and second joints, and the whole of the third and fourth joints fuscous, basal joint longest, second, third and fourth joints shortest and subequal in length.

Length 9 to 10 millim

Hab. Bombay, Bor Ghát (Diccon).—Malacca, Philippines, China.

Australia, Adelaide River (Brit. Mus.).

Some confusion has existed respecting this species. When Stall described his G. discolor he wrote "Hydrometora fossarum? Fabr," and in his reference to Fabricius's species in his 'Hemiptera Fabriciana' he again remarks: "L discolori, Stal, valde affinis videtur. Exemplum typicum maxime mutilum, haud discribendum." If we eliminate Wolff's description and figure (Ic ii, p. 118, fig. 112) which that writer ascribed to this species, but which certainly do not agree with it, I think we may well accept Stal's doubts as to the possibility of separating discolor, Stal, from fossarum, Fabr

967. Gerris sahlbergi, Dist. Ti E & 1879, p 125; id. Sec Yark Miss, Rhynch. p 12, fig 10 (1879)

Head thickly covered with olivaceous pubescence, with a small black spot on vertex, antennæ ochraceous; pronotum ochraceous, pubescent, anterior area, lateral and posterior margins, and a central longitudinal line olivaceous (the central line is sometimes largely ochraceous, and always ochraceous on the anterior pronotal area); hemelytra brownish-ochraceous, with the veins olivaceous: body beneath silvery-grey, pubescent, the central area, lateral margins and apex of abdomen ochraceous; legs ochraceous, anterior femora with an outer longitudinal blackish fascia. Antennæ with the first joint longest, almost as long as second and third joints together, which are subequal in length, fourth a little longer than third

Length 8 to 10 millim Hab. Ladák; Leh (Stoliczka).

968. Gerris tristan, Kirk Rev. d'Ent. 1899, p. 88.

Head black, with a large basal irregularly shaped dark ochraceous spot; antennæ ochraceous, second (excluding base) and third joints fuscous (fourth joint mutilated in typical specimen); pronotum shining black, lateral and posterior margins luteous, an ochraceous spot on centre of anterior area; rostrum ochraceous, its apex black: body beneath silvery-grey pubescent; prosternum and apical abdominal area very pale ochraceous, a small central black spot at base of abdomen; hemelytra fuscous, the veins darker, legs ochraceous; antennæ with the first joint about as

long as on a little longer than the second and third joints together; pronotum with a pronounced central longitudinal carination

Length 6 to 62 millim.

Hab. Ceylon (Green).

C Antennæ with the basal joint very long, about as long as remaining joints taken together

969. Gerris paludum, Fabi Ent Syst iv, p 188 (1794), Amy § Seit Hém p 417 (1843), Hent-Schuff (Hydrometra) Wanz ix, pp. 67, 70, hg. 926 (1853), Fieber (Hydrometra), Eur. Hem p 106 (1861)

Compl syn cf Leth & Sev Cat Gén Hem in, p 62 (1896)

Black, opaque, body beneath silvery-grey pubescent, base of rostrum, coxæ, tiochanters and extreme bases of femora very pale fulvous; pronotum with a strong central longitudinal carinate line, hemelytra with the veins very strong and prominent; legs fuscous; antennæ with the basal joint very long, about as long as the other three joints taken together.

Length 12 to 13 millim

Hab. Burma, Karennee (Fea)—A well-known Palearctic species, already recorded from Turkestan

970. Gerris spinolæ, Leth & See Cat Gén Hém 111, p 63 (1896) Gerris argentata, Spin Ess Hem p 65 (1840), nom præocc

Head, rostrum, pronotum and anterior legs black, intermediate and posterior legs piecous-brown; a central line to anterior area, and lateral margins narrowly, and posterior margins more broadly, of posterior area of pronotum brownish-ochraceous, hemelytra pale brownish, the lateral margins and the veins piecous: body beneath thickly clothed with silvery-grey pubescence; coxe, trochanters, bases of anterior femora, base of rostrum and apex of abdomen dull ochraceous, head, pronotum and legs finely pubescent; pronotum transversely impressed before middle, its posterior area with a distinct central longitudinal carination, antennæ with the first joint about as long as the remaining joints together, third joint much shorter than second, a little shorter than fourth

Length 11 to 12½ millim.

Hab. "North India" (Coll. Sign). Calcutta Ceylon (Brit Mus) Burma. Toungoo (Fea)—China

Position uncertain

971. Gerris armata, Spin Ess Hem p 65 (1840), Mayr (Limnometra), Reisc Nov, Hem p 175 (1866)

"Apterous, hemelytra rudimentary, intermediate coxe armed laterally with a small spine"; abdomen black above, a testaceous spot on the disks of the third, fourth, fifth and sixth segments, in other respects the description of the species agrees with that of

GERRIS 181

G. fluviorum, Fabr., from which it is separated by the constant and remarkable character found on the intermediate coxe.

Length "5 lines" (710 millim.)

Hab Bombay (Dupont) Coromandel (Maindron) Cerlon (fide

Mayr).

I have been shown a specimen of this species from Coromandel, now in the collection of Mr Kirkaldy, which is almost inseparable from G fluviorum, save the very distinct spine on the intermediate coxe. This specimen was fully winged and developed, but as the antennæ were mutilated I cannot locate the species sectionally by the characters of those organs

Species not seen by the writer, and therefore not placed in generic sections.

972 Gerris pectoralis, Mayı (Hydrometra), Verh z.-b Ges Wien, xv, p 443 (1865), id (Hydrometra), Reise Nov, Hem p 170, hg 50 (1866)

Black, opaque; head with two lines between eyes, and beneath with lostrum, a median longitudinal line, narrow lateral and posterior margins to pronotum, steinum and abdomen pale flavous; sternum with three black strie on each side; a lateral longitudinal line to abdomen black, legs fuscous-testaceous, above obscure; tarsi black; sixth abdominal segment on each side triangularly acutely toothed

Length 7 to 73 millim.

Hab. Ceylon.

973 Gerris adelaidis, Dohin, Stett ent. Zeit xxi, p 408 (1860)

Black, sericeous, head with a basal semilunular pale fulvous spot; pronotum with a central carinate line which is anteriorly fulvous, the lateral and posterior margins palely fulvous, hemelytra palely fulvous, outwardly black, the veins black, legs blackish, bases griseous-fulvous, rostrum with the base palely fulvous

Length $11\frac{1}{2}$ millim Hab Ceylon (fide Dohrn)

974 Gerris minuta, Mayr (Limnometra), Verh z-b Ges Wien, xv, p 444 (1865), id (Limnometra), Reise Nov, Hem p 176 (1866).

Fulvous, head with four brown lines between the eyes; pronotum with three black narrow longitudinal lines, and anteriorly two brown lines, mesosternum on each side at margin of pronotum with two narrow fuscous lines, outside a pilose white striga, hemelytra cinereous-brown, lateral margins fuscous, posterior legs brownish-testaceous; abdomen with the sixth segment on each side triangularly dentate

Length 81 millim

Hab Nicobai Islands, Sambelong (fide Mayr).

Genus EOTRECHUS.

Estrechus, Kirk. Lutomologist, 1902, p 137

Type, E. kalıdasa, Kırk. Distribution. Buima

This genus has been founded on the following characters -"Facies of Gerris, Fabr, but distinguished by each tarsus being terminated by two strong, curved, apical, aroliated claws. Tibiæ cylindrical. not tapering." In all other respects Eotischus is very closely allied to Gerns

975. Eotrechus kalidasa, Kuk Entomologist, 1902, p 137

Dark chocolate-brown, posterior pronotal lobe castaneous, ante-

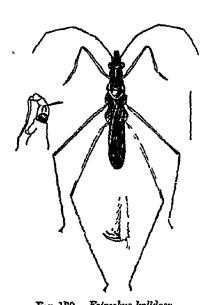


Fig. 130 - Eotrechus kalidasa

Length 10 to 10½ millim. Hab. Burma; Karennee (Fea).

110r lobe with the lateral margins and a central narrow longitudinal fascia ochraceous, hemelytra with the lateral margins and veins a little paler, and with some opaque, cellular, piceous spots; abdomen beneath, legs and antennæ ochraceous; femora with their apices broadly piceous, head beneath centrally piceous; rostrum ochraceous, its apex piceous, antennæ with the first and second joints longest and subequal, third and fourth a little shorter and pronotum dissubequal; tinctly ridged between the lateral angles, which are subprominent and carmate, from thence distinctly obliquely deflected to apex, the apical margin broadly rounded

Genus ONYCHOTRECHUS

Onychotrechus, Ku k. Entomologist, 1903, p 44

Type, O. rhe cenor, Kirk.

Distribution. Oriental Region

The following characters have been relied on for the separation of Onychotrechus - 'Closely allied to Gerris, and intermediate between the latter and Estrechus It differs from the former by the long posterior claws, and from the latter by the claws being somewhat post-apical and inserted in a cleft in the tarsi." First joint of antennæ shorter than any two other joints together; intermediate and posterior legs each more than twice as long as body; second joint of anterior tarsi three times as long as first. Eyes not

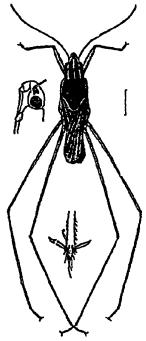


Fig 131
Onychotrechus rhexenor

prominently exserted, adpressed to head; rostrum reaching the middle of the mesosternum

976. Onychotrechus rhexenor, Kull Entomologist, 1903, p 44

Head and pronotum piceous; lateral margins and a median line to head, lateral margins and three discal longitudinal lines to anterior pronotal lobe, head beneath, and rostrum ochraceous, lateral and posterior margins of posterior pronotal lobe greyish white; hemelytra, legs and antennæ pale fuscous, veins to hemelytra distinct. body beneath greyishly pubescent, prosternum, coxæ, trochanters, bases of femora and apex of abdomen very pale ochraceous: first joint of antennæ longest, second longer than either third or fourth, which are almost subequal in length

Length 53 millim

Hab South India, Kanara (Coll

Dist).

977 Onychotrechus sakuntala, Knl (Gerris) Entomologist, 1901, p 117.

Black, palely pubescent, a central line and anterior lateral margins to head, extreme lateral margins of pronotum, and three longitudinal fasciæ (central narrowest) to anterior lobe pale ochraceous, hemelytra fuscous, the veins and posterior pronotal margin pale pubescent; sternum silvery-grey; abdomen pale ochraceous; lateral margins of sternum and abdomen black, that of sternum containing two ochraceous lines; coxæ, legs and rostrum ochraceous; apices of the femora and the tarsi fuscous; antennæ with the basal joint ochraceous, the remaining joints infuscated, the joints almost subequal in length

Length 5½ millim.

Hab. Ceylon: Pundaluoya (Green). Burma (Coll Dist.).
This and the preceding species, although described by Mr. Kirkaldy in different genera, are questionably distinct, and will

probably prove to be the same, when a longer series of specimens can be compared I have examined and compared the types of both species

Genus CYLINDROSTETHUS

Hydrobates, Erichs in Schomb Faun Brit Ginana, p 614 (1848), nom. pærocc.

Cylindrostethus, Fieb Lurop Hem p 33 (1861), Kirl. Entomologiet, 1897, p 258

Type, C linears, Erichs, a Neotropical species Distribution. Neotropical and Oriental Regions

This genus may be easily recognized by the position and structure of the eyes, which are not exserted, but are long and placed obliquely on the sides of the head; the rostrum is also very short, scarcely or only just reaching the anterior coxe. As Bergroth has remarked in this genus, the metasternum apparently consists of two segments, it being divided by a more or less distinct, transverse, impressed line a little before the posterior margin.

978. Cylindrostethus productus, Spin (Gerris) Ess Hem p 64 (1840)
Cylindrostethus fieberi, Mayr, Verh z-b Ges Wien, xx, p 444 (1865)

Piceous-black; disks of sternum and abdomen, a central line

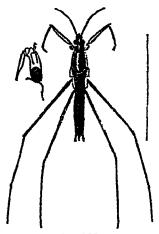


Fig 132 Cylindrostethus productus

to head, broadest between eyes and continued on anterior area of pronotum, posterior margin and sometimes also a narrow central discal line to posterior pronotal area, margins of connevirum, and legs testaceous; antennæ, apices of femora, anterior femora above and beneath, bases of intermediate and posterior femora above, and apices of tibiæ, anterior tibiæ and tarsi and posterior tarsi piceous, a lateral tascia on each side of body silverygrey, antennæ with the first joint longer than the second and third joints together, third shortest, second and fourth subequal.

Length 25 millim

Hab. Travancore (Coll Dist)

Bombay (Dupont) Ceylon; Kandy (Green).

979. Cylindrostethus scrutator, Kirk (Gerns) Rev d'Ent xvm, p 98 (1899)

Dark olivaceous-black; a small spot at base of head and posterior margin of pronotum ferruginous-brown; hemelytra

purplish-brown, the veins black; a lateral marginal fascia to pronotum, lateral areas of acetabula, and a submarginal lateral fascia to abdomen silvery-grey; apices of femora, and the tibus and tarsi to intermediate and posterior legs pale castaneous; head and anterior area of pronotum more or less olivaceously pubescent, the last centrally foveate, the posterior pronotal lobe centrally carinate: antennæ with the first joint longer than the second and third together, second and fourth joints subequal in length.

Length 12 to 14 millim.

Hab. Upper Tenasserim (Coll. Dist.).

Genus PTILOMERA.

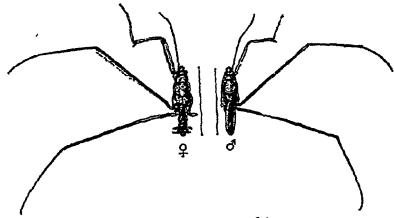
Ptilomera, Amy & Serv Hém. p 413 (1843)

Type, P. laticaudata, Hardw.

Distribution Oriental Region and China.

Antennæ nearly as long as the body, first joint almost as long as the other three joints together; rostrum short; sternum about half the length of the body; abdomen in 2 terminating in an angulated club; anterior legs short, strong, the femora longer than the tibiæ, the last with a distinct apical spine; anterior tarsi almost as long as the tibiæ, intermediate femora fringed with long hairs in the 2.

980. Ptilomera laticaudata, Hardw (Gerns) Trans Linn Soc xiv, p 134, pl. vi, ff 1-4 (1825) Ptilomera laticauda, Amy & Serv Hém p 414, pl viii, f 3 (1848); Herr-Schaff Wanz Ins ix, p 65, f 940 (1853) Ptilomera cingalensis, Stâl, Ofv Vet -Ak Fork. xii, p 190 (1856) Ptilomera tigrina, Uhlei, Proc Ac Philad 1860, p 280



Tig. 133 -Philomera laticaudata

Pale chocolate-brown; hemelytra when present darker with their maigins paler; sternum and abdomen beneath pale silverygrey, antennæ, eyes, anterior angles of posterior lobe of pronotum, disk of abdomen above and apex of rostrum piceous, lateral margins of body silvery-grey, anterior femora with two narrow piceous fasciæ above, and a broad piceous fascia beneath.

Length, & and 2, 13 to 15 millim

Hab. Nepal. Nilgiri Hills (Hampson). Ceylon; Pundaluoya (Green) Burma, Toungoo (Thompson) — Found in many islands of the Malay Archipelago.

Division HALOBATINARIA

Subfam. Halobatinæ, Biunchi, Annuaire Mus St Petersb 1896 p 70

Body short and broad, length in proportion to breadth not much more than 3·1 This division comprises both salt- and freshwater species, which are probably still but moderately known to entomologists owing to their peculiar habits and the consequent difficulty in capturing specimens They are all distinctly surface insects.

Synopsis of Genera.

A Intermediate tibue and first joint of intermediate tarsi with a fringe of long hairs, posterior tarsi one-jointed

HALOBATES, p 186

B Intermediate tibiæ and tarsi without fringe of long hairs

a. Basal joint of anterior tarsi nearly twice as long as second

CHIMARRHOMETRA, p 190

b Basal joint of anterior tarsi much shorter than second

METROCORIS, p 188

Genus HALOBATES

Halobates, Eschsch Entomogr p 106 (1822), id Nat Abhandl Dorp 1823, 1. p 163, Lap Lss Hem p 24 (1832), Amy & Serv Hém p 411 (1843), May, Reise Nov, Hem p. 169 (1866), Buch White, Rep Voy 'Challenger,' Zool VII (19), pp 2, 28, pls 1-111 (1883), Berg: Ent. Month May 1902, p 258

Type, H. micans, Eschsch
Distribution. Found in most of the warm or warm temperate
oceanic regions

Body oval or oblong; head short triangular, antennæ fourjointed, first joint longest, rostrum four-jointed first and second joints very short, third joint longest, eyes large, touching anterior angles of the pronotum, prothorax broader than long, not confluent with mesothorax, which with the metathorax is coalescent; scutellum, hemelytra and wings absent, anterior legs short, stout, tibiæ with a dentiform process near apex, tarsi two-jointed, intermediate and posterior legs long, slender, posterior legs inserted above the intermediate legs, intermediate tibiæ and first joint of tars: fringed with long hairs, tarsi two-jointed, posterior legs with one-jointed tars:

Oceanic insects, often found at great distances from land.

981. Halobates frauenfeldanus, Buch. White, Rep. Voy. Challenger, Zool vii, p. 57, pl. n, f. 3 (1883), With. Wien. ent. Zeit. v, p. 232 (1886)

Halobates micans, part , Frauenf. Verh z-b Ges Wien, xvii, p. 458

(1867)

Halobates flaviventris, Frauenf loc. cit. p. 459, t xii, ff 3, 4, 7-9, nec Esch

"Oval, widest behind the middle (2). Pale heary ash-grey above, head with a brownish-yellow spot on each side posteriorly,

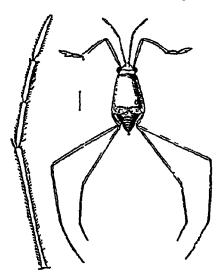


Fig 134 —Halobates frauenfeldanus

united to a narrow line of the same colour on the hind margin, antennæ with the basal halves of the joints, mesosternum prosternum, with a central longitudinal line broadest behind and narrower in front (absent in the o), ventral segments of the abdomen, a spot near the insertion of each of the legs, the front femora below. and a more or less extensive spot at the base above, as well as the underside of the coxe of the middle and hind legs yellow; front femora black above; second, thud and fourth joints of antennæ equal in length, front tarsus with first joint about one-

third shorter than the second joint, middle tarsus with first joint two and one-half times the length of the second." (Buch White)

3 Length 41, breadth 19; middle femur 51 millim

Q., , 42; , 24, , 5 ,, Hab. Indian Ocean, near the Nicobar Islands (Frauenfeld)

Buchanan White had, like myself, not seen the species, he had carefully compiled the diagnosis and description from Frauenfeld's paper, and I have copied White above.

982. Halobates micans, *Lsch Intomographien*, 1, p 107, Taf 1i, f 3 (1822), *Frauenf Terh z-b Ges Wien*, xv11, p 458, Taf x11, f 5 (1867), *Dahl Ergeb der Plankton Exp* 11, p 4, ff. 1, 2, 3, 6 (1893); *Buch White, Rep Voy 'Challenger*, Zool v11, p 43, pl 1, f 2 (1883)

This is another species I have not seen. Buchanan White, who was in the same position, drew up the following description from

the writings of Eschscholtz and Frauenfeld .- " 2. Closely allied to Halobates wuller storffi. Widely oval or conical; hoary ash-grey or blackish grey, somewhat shining, brighter coloured below; with (according to Eschscholtz) brassy reflections, which, however, Frauenfeld denies; eyes black; antennæ and legs black, the front femora bluish, abdomen whitish grey; antennæ and legs black, the front femora bluish; abdomen whitish grey, antennæ rather slender, rather longer than half the body, first joint as long as the other three together, second and third equal in length, fourth joint longer than the third; pronotum strongly concave in front, nearly straight behind, disk with two rather long fovem anteriorly, mesonotum strongly convex anteriorly."

Length 4; breadth 225; middle femur 46 millim.

Hab Indian Ocean, near Ceylon, lat 3° N. (Frauenfeld) -Also reported by Eschscholtz from the South Pacific and South Atlantic

983 Halobates flaviventris, Esch Entomographien, 1, p 109, t 11, f 5 (1822), Buch White, Rep Voy. Challenger, Zool vii, p 55, pl ii, f 2 (1883)

"Oblong, widest in the middle; slaty-grey, silvery-white on the sides and below, head with an oblique transverse reddish-yellow mark (nearly joining at the middle of the hind margin) on each side posteriorly, antennæ and legs brownish-black, front acetabula with outer rim very narrowly, a long triangular blotch in front of the middle acetabula below, hind acetabula with a spot on the outer side, abdomen below (except the sides narrowly), genital segments, disk of the first below and underside of the horns of the second ochreous-yellow, third genital segment above and below brownish-black, the disk of the third below and apex reddish-yellow, antenno with the third joint about two-thirds the length of the second, fourth a little shorter than the second, front tarsus with the first joint about one-fifth shorter than the second, which is cleft before the middle, middle tarsus with the first joint two and one-half times the length of the second" (Buch White) d. Length 5, breadth 2, middle femur 6, hind femur 45

mıllım

Hab Indian Ocean, near Ceylon (Oxford Mus) -According to Eschscholtz, South Atlantic, Fairmaire determined some specimens taken near Madagascar as belonging to this species

Genus METROCORIS

Metrocoris, Mayr, Ve. h z-b Ges Wien, 1, p 445 (1865), id Reise Nov, Hem pp. 169 & 178 (1866), Mein Ent Medd p 140 (1888) Halobatodes, Buch White, Rep Voy 'Challenger,' Zool. vii (19),

pp 23 & 58 (1883)

Type, M stall, Dohrn. Distribution. Oriental and Eastern Palæarctic Regions This genus differs from Halobates by the intermediate tibiæ and tars: being without the fringe of long hairs, from Chimarrhometra it may at once be distinguished by the structural character of the basal joint of the anterior tars, which is much shorter than the second joint

984 Metrocoris compar, Buch White (Halobatodes), Rep Voy 'Challenger,' Zool vii (19), p 68, pl. ii, f. 6 (1883)

"Oblong-oval, widest behind the middle; dull black, with yellowish-testaceous lines and spots, underside of body dull black;

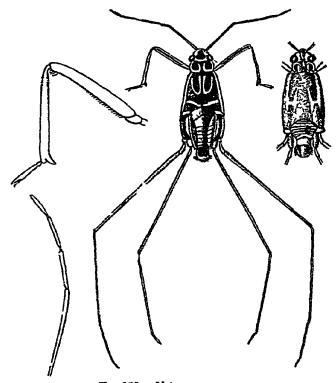


Fig 135 -Metrocors compar.

anterior femora of male without a tubercle near the centre and no notch near the apex" (Buch. White)
3. Length 65; breadth 25; mid. femur 7; hind femur 7 mm.

3. Length 65; breadth 25; mid. femur 7; hind femur 7 mm. 2 , 6; , 3; , 7, , 75, Hab India (Wester Coll, Orford).

985. Metrocoris illustrarius, sp n

Q. Above obscure opaque purplish-brown anteocular portion of head ochraceous, with three large black spots, two discal and one frontal, postocular area, excluding hind margin, black, with two luteous discal spots, a central line and the hind margin

purplish-brown; pronotum with two large orate lateous spots, each divided by an elongate black pot which is clarate at each end; on anterior disk a curved oblique lateous spot inwardly margined with black on each side of posterior area; a pale greyish spot on upper sides of both intermediate and posterior coxm; aldomen with a segmental series of transverse black spots on each side; body beaesth and bases of anterior fomora lateous. Orate, widest at middle, where it is obtusely angulate, antonum piecous, base of first joint ochraceous; rostrum lateous, its apex piecous; intermediate femora slightly longer and stouter than posterior femora; anterior tilim stout slightly shorter than femora

2. Length 31 millim
Hab. Ceylon (Green, Best Mus.)

986. Motrocoris ståli, Idden (Halolates), Sielt. ent Zeit xx1, p. 408 (1860) Metrocoris brevis, Mayr, Verh. z.-b. Ges. Wien, xx, p. 445 (1865), 66 Rose Nov., Hem. p. 170, pl. 1, f. 66 (1866)

Above black, opaque; he id dull flavous-testaceous, with a large central and three smaller anterior spots black; pronotum with two anterior semicircular spots, on the posterior area two parallel longitudinal spots, one on each side shaped like a comma, another on each side transverse and semicircular, a third smaller spot on each side at the apex of the disk, more posteriorly one transverse, two longitudinal, and three smaller apical spots flavous-testaceous; lateral areas and body beneath flavous-testaceous, the first with longitudinal black streaks; anterior come, excepting a black spot above, and the femora, excepting three more or less broad black lines, flavous-testaceous; antenne, intermediate and posterior legs, and anterior tibie blackish; rostrum flavous-testaceous, its apex black.

Length 7 millim. Hab Nilgiri Hills (Maindron). Coylon (fide Dohrn & Mayr)

Genus CHIMARRHOMETRA.

Chimarrhometra, Bunchi, Annuaire Mus. St. Petersb 1896, p 71

Type, C. orientalie, Dist. Distribution Oriental Region

Basal joint of anterior tarsi nearly twice as long as the second; anterior femora much increasated, much thicker than the middle ones, intermediate and posterior tarsi robust, not nearly hair-like; second joint of the antennæ more than two-thirds the length of the third.

987. Chimarrhometra orientalis, Dist (Halobates) Tr. E S 1879, p 126, id (gen ?) See Fail Miss, Rhynch p 12, ff. 11, 12 (1879), Bianchi, Annuare Mus. St Pétersb. 1896, p 71

Brownsh-ochraceous, finely pilose; antennæ with the first joint

curved, 10bust, and about the length of head and pronotum

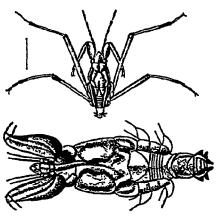


Fig 136 - Chimarrhometra orientalis

together, remaining joints more slender, second and third subequal, fourth a little shorter than third pronotum with a median pale longitudinal line, and a large rounded fovea on posterior portion of disk, rostrum five - jointed, first two joints very robust and somewhat fused together, second minute and much shorter than first, third much the longest, fourth small, slender and black, fifth ochraceous, very slender and hair-like, sternum greyishly pilose, eyes large,

semiglobular, and castaneous, pronotum about the length of head, but broader, to uncate anteriorly, rounded posteriorly; mesonotum and metanotum hardly distinguishable, much longer than pronotum, and gradually and regularly widened posteriorly; legs ochraceous, anterior femora much thickened.

Length 7 to 8 millim

Hab Jhelam Valley (Stoliczka)

Bianchi states that this is a freshwater Himalayan species.

Genus of doubtful position.

Genus HEMIDIPTERA.

Hemidiptera, Levn, Jenaisch Zeit. Nat axi, p 13 (1890)

Type, H. hæckelt, Léon. Distribution. Ceylon.

This genus was founded by Léon on a specimen brought by Haeckel from Ceylon with a number of Halobates. It was preserved in Canada balsam, which made its examination very difficult. Léon's interest was principally devoted to the month-parts, and from his microscopical examination he concluded, in agreement with Dr. Arnold Lang, that the insect was not a Halobates, but more like a Dipteron, though its mouth was formed after the Rhynchotal plan. He therefore considered it belonged to neither of the two Orders mentioned, but to one intermediate between the Rhynchota and Diptera. Dr. Bergroth (Wien, ent Zeit xi, p. 169, 1892) has, to our view, successfully proved its Rhynchotal relationship, and we entirely agree with his suggestion, looking at the figure, that the hemelytra have probably been torn off. It is therefore

impossible to give true or any commensurate generic characters till other specimens have been received, as the figure alone is at present available for study.

988. Hemidiptera hæckeli, Léon, Jenaisch Zeit Nat. xxi, p 13 (1890)

Bei gr. Wien ent. Zeit. xi, p 160 (1892)

The same remarks as made on generic characters apply to any specific diagnosis Léon describes the antennæ as five-jointed, but the true joints are clearly only four, the absence of hemelytra

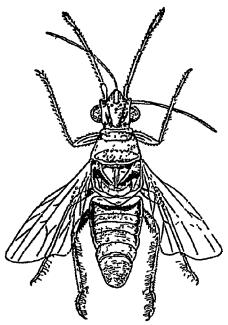


Fig 137 -H udiptera hackeli

has been already discussed; the lostrum is described as fourjointed, second joint longer than first, third longer than second, and tourth longer than first, legs formed for swimming, thickly clothed with long hairs

Length 4 millim.

Hab Ceylon (Haeckel)

Family HENICOCEPHALIDÆ.

This is a very small family, founded on a single genus, though Bergroth has referred to a second genus the published description of which has not appeared

These insects often appear in swarms like gnats, as recorded by Blanchard and Berg in South America and by Green in Ceylon.

Their peculiar structure, especially of the head and pronotum, as detailed in the description of the typical genus renders this family very easily recognizable. The venation of the teginina has been minutely described by Kirby (Journ. Linn. Soc., Zool. xxiv, p. 116, 1891), and figured by Kirkaldy (Ent. Month Mag. 1901, p. 219)

Genus HENICOCEPHALUS.

Enicocephalus, Westw Ti E. S 11, p 22 (1837), Stål, Bid till Rio-Jan. Hem 1, p 81 (1858)

Henicocephalus, Stål, Hem Afi 111, p 166 (1865); Bergi Rev. d'Ent vin, p 319 (1889), Champ Biol Centr.-Am, Rhynch 11, p 158 (1898)

Systelloderes, Blanch. in Gay, Hist de Chile, vin, p 224 (1852)

Oncylocotis, Stål, Öfv Vet -Ak. Fork xii, p 44 (1855)

Stenopirates, Walk Cat Het vii, p 139 (1873)

Dicephalus, Kirby, J. Linn Soc, Zool xxiv, p 115 (1891).

Henschiella, Horv Rev d'Ent vii, p 169 (1888)

Hymenodectes, Uhler, Ti Maryland Acad Sci 1892, p 180

Hymenocoris, Uhler, tom cit p 181.

Type, H flavicollis, Westw, a Neotropical species. Distribution. Apparently of universal distribution.

Body oblong, depressed; head narrowed and prolonged anteriorly, distinctly divided into two divisions by a transverse impression behind eyes, the posterior lobe globose; antennæ a little longer than the pronotum, four-jointed, second joint longest, pronotum with two transverse constrictions, thus exhibiting three distinct lobes, anterior legs subraptorial, the femola more or less incrassated, the anterior tarsi armed with either one or two long apical claws, intermediate and posterior legs moderate, with their tarsi two-jointed *, a short basal and a long apical one; hemelytra complete, the veins robust.

^{*} Westwood, who founded the genus, and some subsequent writers have described these tars; as three-jointed, but we agree with Champion in considering them two-jointed only.

A. Posterior lobe of pronotum distinctly wider than middle lobe

989. Henicocephalus collaris, Walk (Stenopirates), Cat Het. vn, p 139 (1873), Dist Ann Soc Ent Belg xlvii, p 52 (1903)



Fig 138 .- Henuocephalus collaris.

Var a Piceous, anterior and posterior area of head, base and lateral margins of hemelytra, legs and rostrum sanguineous

Var. b. Piceous; margins of hemelytra and the legs sanguineous, anterior femora piceous at base.

Var c As in var. b, but with the unterior

tibiæ piceous, sanguineous at base

Antennæ with third joint much longer than fourth; middle lobe of pronotum smooth, not sculptured, a little longer than posterior lobe and about three times the length of anterior lobe, centrally very finely sulcate, anterior tibic with two apical claus

Length 61 to 7 millim. Hab. " North India " (Bit Mus). Burma, Karennee (Fea)

990. Henicocephalus majusculus, Dist A M. N H (7) x, p 175 (1902)

Head, pronotum and sternum dull reddish-ochraceous; hemelytra piceous; base and lateral margins of hemelytra, legs and abdomen strammeous, abdomen with the lateral areas mottled with brownish, antennæ pale fuscous-brown, basal and apical joints paler in hue. Antennæ finely pilose, second joint slightly longer than the third, anterior lobe of pronotum behind the pronotal collar moderately sculptured and centrally discally sulcate, legs somewhat strongly pilose, eyes black.

Length 11 millim Hab. Ceylon (Green, Brit Mus)

991 Henicocephalus telescopicus, Ku by (Dicephalus), Journ Linn Soc, Zool xxii, p 117, pl ii, f 14 (1891)

Head, pronotum, sternum and hemelytra fuscous-brown, legs and abdomen beneath ochraceous, sublateral segmental abdominal spots, anal segment and anterior femora pale brownish, antennæ brownish-ochraceous, second joint longest, third subequal to or shorter than fourth—variable in this respect; posterior lobe of head shorter than anterior lobe, these two lobes together about as long as pronotum

Length 7 millim. Hab Ceylon, Pundaluoya (Gieen)

Found by Mi Green "flying in bright sunshine in open glade

of jungle near felled timber Flight sustained; three or four insects found frequently playing together like common flies in a room, or like Ephemeride

B. Middle and posterior lobes of pronotum almost equally wide.

992 Henicocephalus robustus, sp n

Head and pronotum pale castaneous, hemelytra dark fuscous, the base and basal area more or less lutescent; body beneath fuscous-brown; legs ochiaceous, antennæ fuscous, aper of third and whole fourth joint, except the extreme base, ochraceous, second joint longest, third joint longer than fourth, posterior lobe of head shorter than anterior lobe, the two lobes together about as long as the pronotum, anterior tarsi armed with two apical claws

Length 7 to 8 millim

Hab Ceylon; Pundaluoya (Green) Burma; Karennee (Coll Dist).

993 Henicocephalus basalis, Westw (Enicocephalus) Tr E S и, р 23 (1837) Henicocephalus ostentus, Dist Ann Soc. Ent Belg xlvn, p 52 (1903)

Piceous, finely greyishly pilose, head behind eyes, extreme posterior margin of pronotum, clavus (excluding apex), basal angles and lateral margins of hemelytra, coxe, bases and apices of femora, tibiæ and tarsi, and posterior margin of prosternum ochraceous, second joint of antenna a little longest, third joint slightly longer than fourth, middle lobe of pronotum sculptured, a little longer than the posterior lobe, which is centrally obscurely sulcate and centrally sinuate in front of the scutellum; hemelytra slightly widened posteriorly anterior tibine with two apical claws.

Length 8 millim

Hab Bengal (Oxford Mus) Bombay; Bor Ghát (Dixon) Coromandel (Maindson) Burma, Teinzo (Fea).

I am indebted to Prof. Poulton for allowing me an opportunity to inspect the type of this species. From Westwood's description alone I had failed to identify it, and had redescribed it.

Family REDUVIIDÆ.

Hend more or less elongate, mobile, eyes usually well separated from the anterior margin of the pronotum, except in the Nabidinæ, in several genera of which the head is immersed to the eyes, rostrum usually stout, bent or curved at base so that in repose it does not lie against the under surface of the head *; the rostrum is three-jointed, except in the subfamily Nabidinæ, in which it consists of

tour joints

Dr. Sharp writing in 1899 estimated that upwards of 2000 species were then known, and, as he remarks, their "habits seem to be chiefly of a predaceous nature, the creatures drawing their nutriment from the animal rather than from the vegetable kingdom, and their chief prey being in all probability other kinds of insects." Mr. R M. Dixon of Bombay, however, who has paid considerable attention to these Rhynchota in his district, where he states they are usually nocturnal in habits, writes thus to me -"They feed chiefly on the mucilaginous juices of plants. sharp needle-like rostrum of the insect seems to fulfil a very important bionomic function It generally pierces the inner bark of a plant and discharges into the wound an acrid poisonous fluid, which rarefles the mucilaginous sap and helps the setæ to suck the juice with ease and convenience, evidently doing no harm to the plant, but, on the contrary, promoting the exudation of the valuable Hence there is reason to believe that the gums, resms, and other resmous vegetable products of commercial value depend largely on the punctures made by the Reduvids. The bloodsucking propensities of some of the species are, I believe, due to a habit acquired probably for purposes of self-defence."

The eggs of some species of this family bear a peculiar operculum,

and afford a subject for special investigation.

Synopses of Subfamilies.

1. Rostrum three-jointed.

A. Anterior coxe much elongated, reaching or passing apex of head

Emesinæ

B. Anterior coxe not more than twice or three times longer than broad

a Ocelli absent

a Body pilose or sericeous; antenmiferous tubercles not prominent; first joint of antennæ long and slender, pronotum not transverse

Sawnæ

^{*} The genus Lanshcosteus (Acanthaspidina) is an exception to this rule

b. Body tomentose; antenniferous tuber- cles laterally obliquely prominent; first joint of antennæ incrassate; pronotum transverseb.	Tribelocephalınæ
 a. Hemelytra, when complete, with the exterior area of membrane longer than the interior area; scutellum of moderate size, not very short. a'. Hemelytra without a quadrangular arealet or cell at interior area of corium, near base of membrane. a². Hemelytra with a discoidal arealet or cell somewhat sex- 	
angular and touching base of membrane, or largely tri- angular	Stenopodinæ.
b^2 . Hemelytra without a discordal areolet or cell. a^3 . Scutellum with its apex tri-	
angular or subtriangular. a. Pronotum constricted before or near middle.	
a^5 . Anterior tars: two- jointed b^5 Anterior tars: three-	Salyavatınæ.
jointed b^4 . Pronotum constricted be-	Acanthaspidinæ
hand middle $$ b^3 . Scutellum with its apex broad	Pıratınæ.
and two or three-spined b'. Hemelytra with a quadrangular areolet or cell at interior area of corium near base of membrane a². First joint of rostrum short, second joint long; space between eyes rarely trans-	Ectrichodiznæ.
verse, generally as long as broad broad broat first joint of rostrum rarely very short, generally elon-	Apiomerinæ
gate, space between the eyes transverse Hemelytra always complete; mem- brane very large, longly extending beyond abdominal apex, its exterior area shorter than interior area; antennæ and legs longly setose;	Harpactormæ
scutellum short, transverse, obtuse 2 Rostrum four-jointed	Holoptilinæ Nabidinæ

Subfamily I. HOLOPTILINÆ.

Holoptilina, Stall, En Hem. 1v, p 3 (1874).

Ocelli present, hemelytia complete, membrane very large, extending far beyond the abdominal apex, antennæ and legs longly setose or pilose, abdomen short rounded on each side, legs unarmed, anterior femora not incrassated.

A small subfamily at present containing about eight genera, none of which occur in the Nearctic or Neotropical Regions, three are peculiar to Australia, and two are found in this fauna

Synopsis of Genera.

A Exterior area of membrane with several posterior transverse veins, head transverse, posteriorly not or obsoletely tuberculous, antennæ and legs densely setose

PTILOCERUS, p 198

B Exterior area of membrane without or with very obsolete transverse veins, head not transverse, posteriorly distinctly tuberculous, antennæ and legs less distinctly setose

Holoptilus, p 199

Genus PTILOCERUS

Ptilocerus, Grey, Zool Misc p 34 (1831), Stål, En. Hem. iv, p 5 Holoptilus, subg Ptilocuemus, Westw Ti E S. 11, p 252 (1840) Maotys, Any & Seiv Hém p. 318 (1843)

Type, P. fuscus, Gray.

Distribution Oriental Region

Rody ovate; head broad, transverse, not posteriorly tuberculate, ocells wide apart, rostrum with the first joint very long, antenne with the first joint very short, second very long and strongly and longly setose, third very small, fourth nearly twice as long as third, hemelytra very much longer than the abdomen, coriaceous portion very short, membranous portion very long, with several short posterior transverse veins forming somewhat well-defined cells, legs strongly setose.

994. Ptilocerus fuscus, Gray, Zool Misc p 34 (1831), Westw (Ptilocnemus), Tr E S 11, p 252, pl xx11, f 8 (1840), id Theraus. Entom p. 193, pl xxxv1, f 14 (1874).

Palely fuscous-rufescent, hemelytra pale at base, membrane more rufescent; second joint of antennæ very long, third minute,

fourth twice as long as third, hemelytra with four longitudinal



Fig 139 -Pulocerus fuscus

and inner transverse yeins which form four apical cells, linear oval white spots between the veins; posterior tibiæ longly luteous-rufescent, setose

Length nucluding hemelytra 8½ millim.

Hab Nepal (Hardwicke) - Java (Hor sfield).

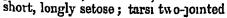
Considerable confusion attaches to the synonymy of this species Amyot and Serville's description and figure (Hém p 318, pl vi, f. 4, 1843) do not seem to apply. I have not seen the species, but reproduce Westwood's description and figure.

Genus HOLOPTILUS.

Holoptilus, Lepel & Serv Encycl Meth x, p 280 (1825), Lap Ess Hêm pp 7 & 50 (1832); Amy & Serv Hêm p 320 (1843), Stâl, Hem Afr. 11, p. 45 (1865), id. En. Hem iv, p 5 (1874) Lasiocera, Lap Ess Hém p 47 (1832).

Type, H. ursus, Lepel. & Serv., a South-African species Distribution Southern Palearctic, Ethiopian, and Oriental Regions

Body ovate; head oval, elevated behind eyes; ocelli wide apart, rostrum with the first joint nearly twice as long as the apical joints together; antennæ with the first joint short, second very long and longly setose, third and fourth short; hemelytra ample, twice or more than twice as long as the abdomen; corraceous portion short, traceolate, membranous portion very large, legs



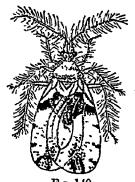


Fig 140 Holopiilus melanospilus

995 Holoptilus melanospilus, Walk (Maotys) Cat Het vn, p 83 (1873), Leth & Sev (Ptilocerus) Cat Gén Hem t m, p 93 (1896), Dist A M N H. (7) x, p 181 (1902).

Head, antennæ, pronotum, scutellum, 10strum, body beneath and legs goldenyellow, hemelytra creamy-white, the veins and basal angles yellow, a larger transverse fascia widest interiorly before middle, and marginal and apical spots dark fuscous-brown, legs and antennæ very longly setose. margins of pronotum and basal margins of hemelytra setose

Length to apex of hemelytra 8 millim Hab "Hindostan" (Bit Mus). Ceylon: Puttalam (Green) 996. Holoptilus viverra, Walk (Maotys) Cat Het vii, p 88 (1873), Westic Thesawus Ent p 192, pl xxxvi, f 11 (1874)

Head, antennæ, pronotum, scutellum, basal area of hemelytra, body beneath, rostrum and legs light ochiaceous, hemelytra yellowish-white, a medial irregular transverse fascia, followed by four transverse lateral marginal spots, of which the first is connected with the transverse tascia, and the third and fourth with a large subapical spot, purplish-black; legs, antennæ and pronotum longly setose

Length to apex of hemelytra 2 millim.

Hab "Hindostan" (Capt Boys, Brit. & Oxford Mus.).

997 Holoptilus fasciatus, Reut Act Soc. Sc Fenn an, p 272 (1881)

Antennæ, legs and veins to diaphanous hemelytra flavous-ferrugineous or fulvous, longly concolorously setose, abdomen piceous, beneath at middle and apex flavo-ferrugineous, hemelytra twice the length of abdomen, whitish byaline, basal third part, four transverse marginal anterior striæ, and a large apical spot which almost passes the interior areola subsericeous-black.

Length with hemelytra 64 millim.

Hab. Bengal, Calcutta (fide Reuter)

. I have not seen this species.

998. Holoptilus hurmanicus, Westw Thesaurus Ent. p 192, pl xxxvi, f 9 (1874)

Fulvous-brown, hemelytra with the basal area whitish with the veins fulvous, apical area, more than half, fuscous-brown, the veins and some irregular suffusions fulvous, and with piceous spots on its margin and at apical angle; legs, antennæ, margins of pronotum and basal margin of hemelytra longly brownly setose.

Length excluding hemelytra 5 millim.

Hab Burma (Or ford Mus.)

I have not seen this species, the description of which is founded on Westwood's short comparative diagnosis and his figure. He states that the species is also contained in the British Museum, but it is not to be found in that collection at the present time

Subfamily II EMESINÆ.

Emesina, Stål, En Hem iv, p 4 (1874)

This subfamily of the Reduvidæ is easily recognized by the elongate anterior coxe and general raptorial appearance of the anterior legs, which have a considerable resemblance to those of the orthopterous family Mantidæ The species are either winged or

apterous, and some of the division Emesaria resemble the so-called "walking-stick" insects of the orthopterous family Phasmidæ

The Emesine are almost universally distributed and are very predaceous insects Their anterior legs are particularly developed and adapted for capturing and holding their prey, the greatly elongated coxe giving them no inconsiderable resemblance to small or undeveloped species of Mantidæ Some species of the Stenolæmaria also somewhat resemble members of the Tipulidæ (Dipleia)

In the genus Plaaria, found in this fauna, one species, P. domestica, Scop. (=maiginatus, Hein.), has been described by Heineken as being so predaceous, that a female killed and sucked a companion of her own sex, her own mate, and, after only a few days' fast, her own young, and sucked her own eggs '

Division STENOLÆMARIA

Ploianaria, Stal (part), En Hem iv, p 92 (1874)

Anterior femora spined beneath for their whole length, a little or considerably longer than the tibiæ; anterior tarsi short, not longer or a little longer than the posterior tarsi, hemelytra present or absent, when present, so far as known, ornamented with fuscous; scutellum and postscutellum frequently spined at

Four genera found in British India are now included in this

division

Synopsis of Genera.

A Hemelytra present and fully developed

a Scutellum spined

a Thorax medially attenuated and cylin-

b Thorax with the lateral margins almost continuous

b Scutellum without spines

B Hemelytra absent.

STENOLEMUS p 203

PLOIABIOLA, p 201 MYIOPHANES, p 204 Eugubinus, p 206

Genus PLOIARIOLA.

Ploiariola, Rem Act Soc Sc Fenn vv, p. 711 (1888)
Ploiaria, Scop (part) Del Fl et Faun Insub 111, p 51 (1787),
Dohrn, Linn Ent xiv, p 214 (1860), Stål, En Hem iv, p 92
(1874), Saund Hem Het Brit Islas p 158 (1892) Gerris, Fabr (part) Ent Syst iv, p 187 (1794)
Plearia, Amy & Seiv Hém p 396 (1843), Fieber, Eur Hem
pp 41, 149 (1861), Reut Öfi Vet-Ak Fork 1872, no 6, p 65, nec Scop (1786)

? Ploiarrodes, Buch White, A. M. N. H. (5) vn, p. 58 (1981), Champ. Biol Centr-Am, Rhynch n, p. 163 (1998)

Type, P. vagabunda, Linu., a European species
Distribution. Nearctic, Palmarctic, and Oriental Regions.

Elongate, with very long antenna and legs, head rounded and subglobose behind eyes, ocelli absent, vertex with a strong transverse impression; antenniferous tubercles strongly developed and prominent; antenna very long, first and second joints subequal in length, third and fourth together about half as long as second, rostrum scarcely longer than head; pronotum'widened posteriorly, the lateral margins nearly straight and carmate, scutellium with two spines, one at base, the other at apex, below the last is another, which according to Saunders is on the basal segment of the abdomen, and Puton says it is "sur le scutum du métathorar", hemelytra submembranous, membrane large, apical angle of cornum long, acute, legs long, slender; covæ elongate, those of the anterior legs produce beyond the apex of the head, anterior femora moderately in assate.

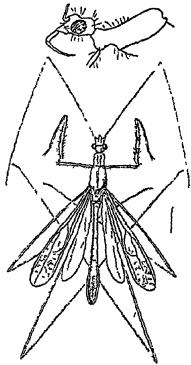


Fig 141 -Plotariola culata

999. Ploiariola oculata, Reut (Ploearia) Act Soc Sc Ferm VIL p 338 (1881)

Head, anterior lobe of pronotum, abdomen beneath and connexivum fuscous abdomen above and scutelium ochraceous, posterior lobe of pronotum pale luteous, rostrum, antenne and legs very pale luteous, with numerous fuscous annulations

Length 51 millim.

Hab. Ceylon (Nietner),
Peradeniya (Green)

Mr G. Green informs me that this species captures its prey in the same manner as the Mantis does; when not on the move it slowly raises and depresses its body, its long legs seeming to act like springs. Its food consists of minute insects. Mr Green kept specimens in confinement,

and found that they were able to catch insects of the size of grats, &c

Genus STENOLÆMUS

Stenolemus, Sign Ann Soc Ent Fi 1858, p 251, Dolin, Linn *Ent* viv, p 214 (1860)

Stenolæmus, Champ Biol Centr - Am, Rhynch 11, p 163 (1898)

Type, S. spiniventius, Sign., from Mexico

Distribution Neotropical, Palmarctic, Ethiopian, and Oriental

Regions

Head small, rounded posteriorly, profoundly impressed between the eyes; lostrum reaching but not passing the anterior coxe; antennæ long, first joint somewhat stout and longly hirsute, remaining joints more slender, less longly hirsute, first and second joints longest, thorax long, sharply divided into three parts, the anterior portion globose, the posterior portion somewhat tuberculous, those portions united by a central narrow cylindrical area, anterior coxe very long, about half the length of femora, which are armed beneath with a series of long fine spines, posterior legs slender. very longly hirsute, hemelytra long, membranous, the apical margin distinctly or indistinctly concave, scutellium armed with two spines, one discal, the other apical.

1000 Stenolæmus crassirostris, Stål, Öfv Vet-Al. Forh 1870 p 702

-Creamy-white, longly pilose, antennæ and legs annulated with

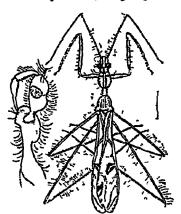


Fig 142 - Stenolæmus crassirostris

fuscous, hemelytra varied with fuscous; middle cylindrical portion of the thorax shorter than either of the other thoracic segments, scutellar spines straight, hemelytra with three chocolatebrown irregularly shaped spots one on disk near lateral margin, one near apex of inner margin, the other more or less broken near apical margin.

Length 7 millim.

Hab. Ceylon: Peradeniya (Green) —Philippines (Semper)

I have to thank Dr. Sjostedt of the Stockholm Museum, to: lending me a cotype of Stal's species with which to compare the Ceylonese specimen.

1001 Stenolæmus greeni, Dist A M N H (7) x1, p 256 (1903

Brownish-ochraceous; three pale striæ (one central and two lateral) to globose portion of pronotum, pedunculate portion and posterior margin of pronotum pale ochraceous; legs luteous. anterior legs considerably but obscurely annulated with pale brownish, intermediate and posterior femora with several brownish annulations, intermediate tibize with a subbasal annulation, posterior tibize mutilated, antennæ annulated with brownish tegmina creamy-white, with large brown spots, of which the two largest are discal, one apical and angular, a smaller spot at inner angle and a few very small and nebulous on apical area, pedunculate portion of pronotion a little shorter than either of ismaning portions posterior portion tricarinate

Length 8 millim.

Hab "India' (Brit Mvs.). Ceylon (Green)

Allied to the preceding species (S crassrosti is, Stil), but with the pedunculated portion of the pronotum considerably longer.

1002. Stenolæmus atkinsom, Dust. A M N H (7) xi, p 256 (1903)

Creamy-white, longly pilose, anternæ with three broad brownish annulations to first and second joints, head with the eyes piceous and with a pale brownish lateral streak behind eyes, also two central lines of the same colour on the pedunculated portion of pronotum, basal area of pronotum, three annulations to anterior femora, five annulations to intermediate and posterior femora, three annulations to anterior tibiæ, a subbasal annulation to intermediate and posterior tibiæ, coxal spots and broken fasciæ to abdomen brownish-ochraceous, tegmina tinted with brownish about the veins and with three distinct brown spots—one smallest and discal before centre, one elongate discal with a pale central vein beyond centre, the third apical, also with a pale vein; pedunculated portion of pronotum long, about as long as each of the remaining portions, pronotum with a distinct central posterior carmation, the lateral angles obtusely tuberculate

Length 11 millim.

Hab India; North-West Provinces (Horne, Brit Mus)

Genus MYIOPHANES

Myrophanes, Reut Act Soc Sc Fenn xn p 337 (1881), Rev d'Ent v1, p 166 (1887)

Type, M typulma, Reut, from China and Japan Distribution Eastern Palæarctic, Oriental, and Australasian

This genus may be here primarily identified by the pronotum, which in structure has the anterior lobe strongly constructed posteriorly, but not pedinculate, the tegmina are complete, passing the apex of the abdomen, the part representing the membrane very long and exhibiting four more or less large perfect cells; the intermediate and posterior legs are very longly pilose on each side; the rostrum about reaches the anterior coxe, the first joint and basal area of second joint robust and increasate, these joints almost subequal in length, the first a little longest, legs long and slender, anterior femora somewhat strongly spined beneath

1003 Myiophanes greeni, sp n.

Creamy-white; head (excluding extreme apex), antennæ (excluding basal tubercles), a central oblique spot on each side of

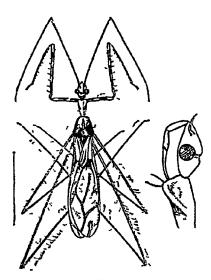


Fig. 143 - Mytophanes greent

anterioi pronotal lobe, posterior lobe of pronotum, scutellum, two broad annulations to anterior coxe, three broad annulations to anterior femora, anterior tibiæ (excluding base), intermediate and posterior legs, meso- and metasterna, and five broad transverse annulations to abdomen dark fuscous; apex of first joint of antennæ, two elongate spots on anterior area of posterior pronotal lobe, apices of intermediate and posterior femora and bases of tibiæ belonging to these legs, and anterior margin of prosternum creamy-white, bemelytra with the basal area or corrum creamy-white, the membranal area pale fuscous,

the venation robust and a little darker, antennæ slender, pilose, first and second joints subequal in length; intermediate tibiæ longer than the femora, posterior tibine much longer than the femora; intermediate and posterior legs longly pilose on each side

> Length to apex of abdomen 151, to apex of hemelytra 161 millim Hab. Cevlon: Puttalam (Green)

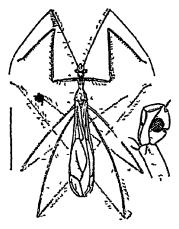


Fig 144 - Mytophanes karenta

intermediate and posterior legs longly pilose on each s

1004. Myiophanes karenia, sp. n

Very pale ochraceous; antennæ, base of second joint of rostrum, anterior femora and tibiæ, inteimediate and posterior legs, head between eyes, venation of hemelytra, and lateral margins of abdomen pale fuscous; two oblique marginal fasciæ on each side ot anterior pronotal lobe, a submaiginal fascia to posterior pronotal lobe, apices of femora, and bases of tibiæ creamy-white, antennæ concolorous, finely pilose, first and second joints subequal;

the femora a little darker before the pale apices, intermediate and posterior femora distinctly slightly curved

Length to apex of abdomen 13, to apex of hemelytra 14 millim Hab Burma, Rangoon (Coll Dist)

Genus EUGUBINUS.

Eugubinus, Dist A M N H (7) x11, p. 253 (1903)

Type, E araneus, Dist Distribution British India

Elongate, apterous, head globose on disk, anteocular area shorter than postocular, base constricted and somewhat pedunculate at base, eyes large and prominent, rostrum reaching the anterior coxe, first and second joints incrassated and almost subequal in length, basal joint strongly curved, second joint passing eyes, antenniferous tubercles long and slender, antennæ slender, first joint about as long as head and pronotum together, pronotum with the anterior lobe shorter than the posterior, broadest and truncate anteriorly, attenuated posteriorly, but not pedunculate, posterior lobe elongate, margins subparallel, anterior coxe shorter than anterior tibiæ, which are about one-third shorter than anterior femora, the last finely spined for about their entire length with a prominent spine near base, posterior femora passing abdominal apex, posterior tibiæ considerably longer than the femora, anterior tarsi short, rigid, two-jointed, basal joint shortest

1005 Eugubinus araneus, Dist A. M. N H (7) x11, p 253 (1903)

Pale obscure ochraceous; head (excluding apex) black, pronotum

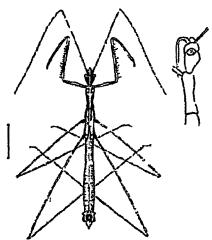


Fig 145 - Eugubinus araneus

with brownish marks and suffusions; antennæ, legs and rostrum pale creamy-white, somewhat thickly annulated with brown,

intermediate and posterior coxæ, trochanters, and spots to apical segment of abdomen piceous; anterior coxæ and femora each with two broad brown annulations; anterior tibiæ with three annulations, apex of anterior tarsi and the intermediate and posterior tarsi fuscous; rostrum with the second joint annulated with brown; antennæ, intermediate and posterior legs much and closely annulated with brown.

Length 83 millim.

Hab. Uran, near Bombay (Aitken)

Found living in nest of a spider (Theridium sp.).

Division LEISTARCHARIA *.

Leistarcharia, Stal (part), En Hem iv, p. 92 (1874).

Anterior femora spined beneath for their whole length; anterior tarsi long, not or a very little shorter than the tibize; hemelytra either not or sometimes very strongly marked with fuscous

Synopsis of Genera.

A. Species winged

a Pronotum more than twice the length of head; anterior tibise and tarsi united almost the length of femora

b Pronotum less than twice the length of head; anterior tibue and tarsi united considerably shorter than femora.

B Species apterous

Bagauda, p 207.

LUTEVA, p. 208 PLOBARIA, p. 209

Genus BAGAUDA.

Bagauda, Bergi Rev d'Ent xxII, p. 12 (1903)

Type, B avidus, Bergr.

Distribution Oriental Region

Head suboval, above and beneath convex, subequal in width to apex of pronotum, narrower in front of eyes than behind; rostrum with the first joint reaching middle of anteocular portion of head, second subequal to first, third longer than second, first joint of antennae three times longer than pronotum; pronotum more than twice the length of head, above mesonotum outwardly produced, base considerably wider than apex, medially strongly constricted, basal margin sinuate; scutellum subtriangular; hemelytra passing abdominal apex, exterior cell of membrane longer than interior cell; anterior femora moderately incrassated, beneath finely spinose, basal spines most prominent; anterior tibiae and tarsi united about as long as femora, the tarsus single-jointed, posterior femora longly passing the abdominal apex.

^{*} Founded on the genus Levstarches, Dohrn, represented by an American species

1006. Bagauda avidus, Bergr. Rev d'Ent. x11, p. 13 (1903).

Brownish-ochraceous, opaque, beneath paler, antennæ piceous, posterior femora fuscous; apices of intermediate and posterior femora and bases of intermediate and posterior tibue creamy-white, the fine spines of the anterior femora black; second joint of antennæ distinctly shorter than first; anterior come more than half as long again as head, posterior angles of pronotum distinctly nodulose.

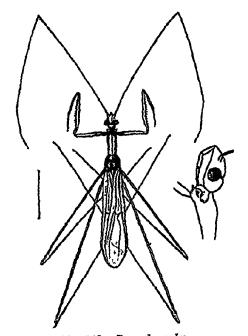


Fig. 146 —Bagunda aridus

Length of & Q, excluding hemelytra, 12 milim.

Hab. Bombay (Wroughton) Ceylon (Green).

Dr. Bergroth has obligingly submitted a cotype of his species to me, for comparison with my Ceylonese specimen

Genus LUTEVA.

Luteva, Dohrn, Linn Ent xiv, pp 213 & 242 (1860), Stdl, En Hem ii, p. 126 (1872), id op cet iv, p 93 (1874), Champ Biol Centi-Am, Rhynch ii, p 163 (1898).

Type, L concolor, Dohrn, from the Philippines.

Distribution Nearctic, Neotropical, and Oriental Regions; also recorded from Hawaii.

Body subelongate, head anteriorly cylindrical, broad posteriorly, and somewhat attenuated eyes moderate in size; rostrum with

the first and second joints very slightly incrassated, anterior trochanters armed with one or two slender spines or setæ; body winged, the hemelytra reaching the abdominal apex; anterior femora thickly spinose beneath for whole length, anterior tarsi uni- or biungulate.

1007 Luteva feana, Dist Entomologist, axxvi, p 1 (1903).

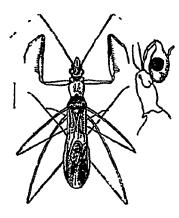


Fig 147 - Lutera feana.

lobe Piceous. anterior anterior margin of posterior lobe of pronotum, body beneath (excluding apex of abdomen), coxæ, bases and apices of anterior femora and tibiæ, and bases of intermediate and posterior femora luteous, a large spot on corium at base of membrane and a small apical spot to membrane cretaceous - white. Anterior coxe considerably passing apex of head; anterior lobe of pronotum glabrous, posterior lobe punctate; basal joint of antennæ luteous at base, about as long as abdomen; anterior femora thickly and finely spinous beneath

Length 5 millim. Hab. Burms, Bhamo, Palon (Fea).

Genus PLEARIA

Ploiaria, Scop Del Flor et Faun Insubi 1, p 60 (1786); Reut Act Soc Sc Fenn x1, p 713 (1888) Champ. Biol Centr -Am, Rhynch 11, p 163 (1898)

Cerascopus, Heinel Zool Journ v, p 36 (1830), Stal, En Hem 11, p 126 (1872), & 1v, p 93 (1874).

Emesodema, Spin Ess Hem p 87 (1840), Dohrn, Linn Ent. xiv, pp 213, 246 (1860)

Type, P. domestica, Scop., a Palearctic species

Distribution Widely distributed, already recorded from the Palæarctic, Nearctic, Neotropical, Oriental, and Australasian Regions.

Differing from the preceding genus (Lutera) by having the body completely apterous, the anterior trochanters are armed with one or two long acute spines; the pronotum is about as long as the mesonotum, eyes small

1008 Plœaria greeni, sp n

Head, pronotum, anterior legs, sternum, rostrum and coxæ pale ochraceous; antennæ, mesonotum, and intermediate and posterior leos brownish-ochraceous; abdomen fuscous, apices of anterior vol II.

femora pale fuscous; first joint of antenne nearly as long as body; anterior tible and tarsi together nearly as long as femora, auterior

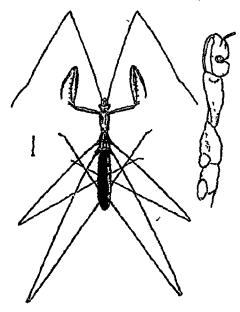


Fig 148.—Plearia greeni

tarsi almost as long as tibiæ, apices of the posterior femora creamy-white.

Length 52 millim.

Hab. Ceylon; Peradeniya (Green).

Division EMESARIA.

Emesaria, Stal (part), En Hem iv, p 93 (1874).

Anterior femora spined beneath only from about or near middle, head much narrowed at base; posterior femora either almost reaching or passing abdominal apex; legs very long.

Synopsis of Genera.

A Anterior tarsi consisting of one joint

- a Head and thorax granulate, first joint of rostrum short, much shorter than anteocular portion of head
 - a Anterior tarm shorter than tibin .
 L Anterior tarm longer than tibin
- b Head and thorax levigate, first joint of rostrum longer than anteocular portion of head . .
- B Anterior tarsi three-jointed .

Ghilianella, p 211 Gomesius, p. 212.

Ischvoba na, p. 213. Gardi na, p. 214

Genus GHILIANELLA.

Ghilanella, Spin Gen d'Ins Artr. p 142 (1852), Dohm, Linn Ent xiv, p 236 (1860). Stål, Ofo Vet-Al. Förh, 1862, p 504, id. op cit 1870, p 704 note, id. Hem Afr 111, p 162 (1865); En. Hem ii, pp 125 & 126 (1872), Champ Biol Centr-Am, Rhynch. 11, p 163 (1898)

Emesa, Burm Handb ii, p 223 (1835), Dohrn (part.), Linn. Ent. xiv, p 236 (1860)

Type, G. filiventris, Spin, a Neotropical species

Distribution Neotropical, Ethiopian, and Oriental Regions.

Anterior tarsi compressed, claw-like, the joints fused into one; completely apterous; mesothorax anteriorly compressed and narrowed; anterior femora spinose from about the middle, the first spine very long; head and thorax granulate.

According to Pascoe, the peculiarly linear form of the species of this genus allows the young larvæ to be carried about by the mother, the sleuder abdomen of the larva being curled around the thorax of the parent.

1009. Ghilianella phasma, sp n.

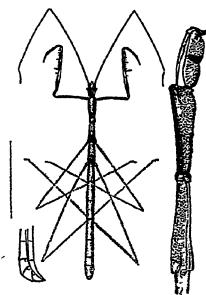


Fig 149 -Ghilianella phasma

Length 17 millim.

Hab Burma, Karennee (Coll Dist)

Piceous-brown, opaque; antennæ, three longitudinal fascize to postocular area of head, two of which appear for a short distance on apex of pronotum, and the legs brownish-ochraceous; apex of first joint of antennæ piceous; legs much annulated with very pale luteous, the annulations to the intermediate and posterior tibize being confined to the basal areas; head and thorax finely granulate ; meso - and metanotum and abdomen above with a fine central longitudinal sulcation: prothorax a little longer than meso- or metathorax : first joint of autennæ a little shorter than abdomen.

Genus GOMESIUS, nov

Type, G. predatorus, Dist Distribution Ceylon.

Elongate, wings rudimentary, legs very long, rostrum reaching anterior coam, first joint short, not nearly reaching eyes, second about twice as long as first; antenne with the first joint very slightly curved, longer than second, anterior coam long but shorter than femora; anterior femora a little sinuate beneath, finely spinous from apex to about one-third from base, where there is a very long prominent spine (in the typical specimen the right femur has two spines as shown in figure); anterior tarsi half as long again as thim, compressed, claw-like, the joints fused into one, apparently two apical claws, one distinct, the other subobsolete; head and thorax granulate, prothorax long with two medial tuberculous spines, hemelytra rudimentary, extending only to about one-third of abdomen.

1010. Gomesius predatorius, sp n

Fuscous; antennæ much annulated with ochraceous; rostrum biannulated with ochraceous, anterior femora much suffused with ochraceous, anterior tibiæ with 'a subbasal annulation, and tarsi

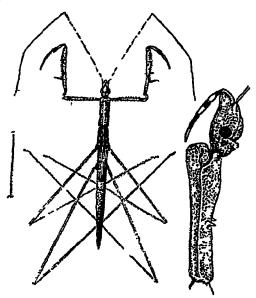


Fig 150 - Gomesius predatorius

with a basal annulation, ochraceous, intermediate and posterior legs ochraceous, the femora above and tibus near base fuscously annulate, apices of tibus and the tarsi fuscous.

Length 15 millim.

Hab Ceylon, Kandy (Green).

Genus ISCHNOBÆNA

Ischnobena, Stål, Öfv. Vet -Ak. Fork. 1870, p 703, id En Hem. 17, p. 93 (1874)

Type, I. macerrima, Stal.

Distribution. Oriental and Ethiopian Regions.

Body slender, cylindrical, long, apterous, head oblong, inte- and postocular parts of nearly equal length, antennæ very long, first joint only a little shorter than half the length of body, rostrum with the first joint long, basal joint slightly passing region of eyes; anterior tarsi of one joint; thorax very long, only about one-quarter shorter than abdomen; anterior femora more than twice as long as the anterior table and tarsi together and densely spinous beneath; posterior femora variable in length, sometimes not quite reaching, sometimes passing, the abdominal apex.

A Posterior femora slightly passing the abdominal apex.

1011 Ischnobæna macerrima, Stål, Öfv. Vet -Al. Forh 1870, p 703, pl vm, ff 15 & 15 a

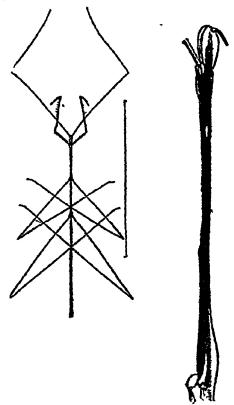


Fig 151 -Ischnobena macerrina

Piceous; pronotum near middle somewhat tawny; head, rostrum, apex of pronotum, apex of abdomen, base of anterior

coxe, the intermediate and posterior coxe and bases of femora brownish-ochraceous, annulation to anterior femora, a broad central annulation to anterior tibie, and two or three small annulations to intermediate and posterior tibie, before the middle, obscure pale stramineous.

Length 36½ millim.

Hab. Ceylon (Green) -Philippines (Semper).

B. Posterior femoia not quite reaching the abdominal apex

1012. Ischnobæna henrici, *Dohrn* (Emesa), *Lunn Ent.* xiv, pp. 216 & 218 (1860)

Piceous; head, a central line to thorax above and beneath luteous, abdominal segments with a small elongate creamy-white spot; legs and antennæ fuscous-brown, basal joint of antennæ and the intermediate and posterior legs with numerous small creamy-white annulations, anterior tibiæ, coxal spots, and a spot beneath at junction of meso- and metasterna very pale luteous, anterior tibiæ with a basal and apical annulation and apex of tarsi brownish-ochraceous Posterior temora not reaching abdominal apex

Length 27 to 32 millim. Hab. Ceylon (Green).

Genus GARDENA.

Gardena, Dohrn, Linn Ent XIV, p 214 (1860), Stal, Ofv. Vet -Al. For h 1870, p 704 note, id. En. Hem. IV, p 99 (1874), Champ Biol Centr.-Amer, Rhynch ii, p 163 (1898)

Type, G. melinarthrum, Dohrn.

Distribution. Neotropical, Palæarctic, Oriental, and Australasian

Regions
Body long, slender, cylindrical, head much attenuated and pedunculate at base, rostrum about reaching the anterior coxe, first and second joints stoutest, third longest, hemelytra either absent, or when present reaching to about half the length of abdomen; anterior femora from middle to apex thickly spined

beneath, tarsi three-jointed

A. Hemelytra present; first joint of antennæ shorter than abdomen

1013. Gardena bicolor, sp n

Anteocular portion of head, posterior lobe of pronotum, mesoand metasterna, anterior trochanters, intermediate and posterior coxæ and trochanters, and apical area of abdomen beneath piceous, postoculai portion of head, hemelytra, and basal area of abdomen beneath brownish piceous, antennæ, rostrum, anterior lobe of pronotum, and legs pale castaneous; apices of intermediate and posterior femora, and bases of intermediate and posterior tibiæ (excluding a small spot) creamy-white; first joint of antennæ

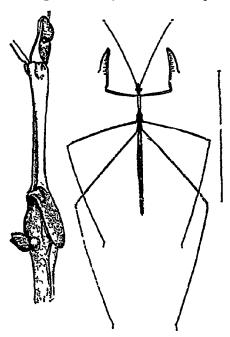


Fig 152 -Gardena bicolor

shorter than abdomen; hemelytra present, about reaching middle of abdomen

Length 30 millim.

Hab. Burma; near Rangoon (Coll. Dist).

B Apterous; first joint of antennæ about as long as abdomen

1014 Gardena melmarthrum, Dohrn, Linn Ent xiv, p 214 (1860); id op cit xv, p 64 (1863)

Black, shining, head brownish-ochraceous, piceous at base; rostrum ochraceous, darker at base; coxæ, trochanters, and bases of intermediate and posterior femora brownish-ochraceous; apices of intermediate and posterior femora, and bases of intermediate and posterior tibiæ (excluding a small spot) creamy-white; first joint of antennæ about as long as abdomen, posterior femora much shorter than tibiæ, but considerably passing apex of abdomen; hemelytra absent.

Length 20 to 25 millim. Hab. Ceylon (Green).

The following species have not been seen by the writer and probably should be included in the Divison Emesaria:—

1015 Emesa? invisiblis, Dohrn, Lann. Ent. xiv, pp. 217 & 219, pl. 1, f. 7 (1860).

Fuscous, opaque; head flavous with a lateral fulvous vitta; eyes fulvous; prothorax with apical medial guttæ and base of mesothorax obsoletely white; metathorax longer than prothorax, mesothorax smallest, abdominal apex flavous, segments with a single basal flavous spot; legs brown, annulated with flavous, the anterior a little shorter than the thorax, antennæ unicolorous, opaque, rostrum flavous, shining, laterally obsoletely fulvous.

Length 33 millim.

Hab. Ceylon (fide Dohrn).

- 1016 Emesa filum, Fabr. (Cimex) Gen p 301 (1776); id. (Cimex)
 Spec Ins 11, p 376 (1781), id. (Cimex) Mant 11, p 308 (1787), id
 (Gerris) Entom Syst. 1v, p 191 (1794), id (Emesa) Syst Rhyng.
 p 263 (1803), Dohrn (Emesa), Linn Ent. xiv, p. 230 (1860)
- "Fuscous, hemelytra abbreviated, legs very long, antennæ as long as body; thorax cylindrical, linearly fuscous, abdomen elongate, cylindrical, fuscous; legs very long, palely annulated."

 Hab. "India orientalis."
 - ⁹ Emesa filum, Brullé, Hist Ins ix, p 312, pl. xxiv, .1 (1835), Blanch. Hist Ins iii, p 99 (1840).

Blanchard states that the Fabrician species and the one described and figured as such by Brullé are distinct. He also gives the habitat as "Indes-orientales" and Mauritius.

Division METAPTERARIA *.

Metapteraria, Stäl, En Hem. 1v, p 93 (1874)

Anterior femora spined beneath from near middle; head not prominently narrowed posteriorly, posterior femora nearly reaching or passing abdominal apex; head between antenuiferous tubercles distinctly spinous or tuberculous.

Genus ISCHNONYCTES.

Ischnonyctes, Stål, En Hem 1v, p. 94 (1874) Emess, Lucas, Exploi Alg, Zool. 111, p 49 (1849).

Type, I. barbarus, Lucas, a Southern Palæarctic species
Distribution. Palæarctic, Ethiopian, and Oriental Regions
Head not pedunculate at base, first joint of rostrum considerably longer than the second postocular portion of head longer

^{*} Founded on the genus Metapterus, Costa, represented by a Palearctic species.

than broad; one or two long spines to anterior femora situate before middle; body apterous, or hemelytra when present not extending much beyond the middle of the abdomen.

1017. Ischnonyctes alatus, sp n.

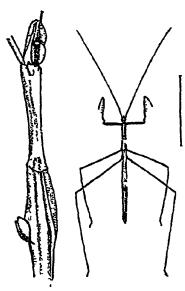


Fig 153 - Ischnonyctes alatus

Pale brownish-ochraceous, eyes, apex of rostrum, apex of anterior tibiæ, and apices of anterior tarsi piceous; head beneath and sternum brownish; first joint of antennæ apically piceous, its extreme apex luteous; first joint of antennæ about as long as anterior femora and coxe together; apices of femoral spines piceous; posterior lobe of pronotum with two central carinate lines converging posteriorly; hemelytra about reaching middle of abdomen; posterior femora not quite reaching abdominal apex, shorter than the tibiæ, anterior tibie and apices of intermediate and posterior tibiæ obscurely annulated with brown.

Length 16 millim. Hab. Ceylon; Peradeniya (Green).

Subfamily III. SAICINÆ.

Saicina, Stal, En Hem iv, p 4 (1874)

As in the preceding subfamily, Emesinæ, ocelli are absent, but the coxe are not elongately produced, the body is pilose or sericeous; the antenniferous tubercles are not laterally prominent, first joint of antennæ long and slender, pronotum elongate.

Only one genus of this small subfamily is at present known

from British India.

Genus POLYTOXUS.

Polytoxus, Spin Ins Artr p 47 (1858); Reut Rev d'Ent 1x, p 250 (1890)

Acanthothorax, Costa, Eserc Acc Asp. Nat Nap (2) in (Ragg. Emt Sicil), p 137 (1840), Stål, Öfv Vet-Al. Foi h 1872, no 6, p. 47, id En Hem iv, p 91 (1874), nec Gæde, Colcopt 1833 Leptomera, Montr Ann Soc Linn Lyon, (2) xi, p 238 (1864) Costiella, Reut Rev d'Ent ix, p 241 (1890)

Type, P sangumeus, Costa, a Palæarctic species.

Distribution Palæarctic, Ethiopian, Oriental, and Australasian Regions

Scutellum short, obtuse, somewhat posteriorly rounded, armed with an erect or suberect spine, postscutellum acutely produced, its apex distinctly reflexed; pronotum longer than broad, anterior lobe subelevated, anteriorly and posteriorly on each side subtuberculate, anteriorly perpendicularly deflected, the apical angles tuberculate; first joint of rostrum slightly passing eyes, body elongate; eyes only slightly prominent; anterior femora beneath rigidly setose or finely spinous.

As this is the only genus of Saicinæ occurring in British India, it is unnecessary to refer to the venation of the membrane for

characters which separate it from Neotropical genera

A. Pronotal lateral spines shorter than length of pronotum

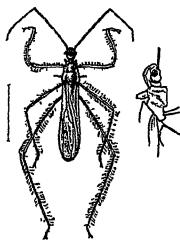


Fig 154 -Polytoxus pallescens

1018 Polytoxus pallescens, Dist.

A. M. N. H. (7) x1, p 257
(1903).

Pale strammeous; eyes black, legs strongly pilose; pronotal, lateral and scutellar spines with their apices fuscous, anterior prosternal spines long, robust, prominent; posterior femora about reaching apex of abdomen; anterior pronotal lobe somewhat broadly centrally foveate, with strongly carmate margins, basal joint of antennæ almost as long as posterior femora.

Length 14 millim.

Hab. Ceylon (Green, Brit Mus.).

1019. Polytoxus maculatus, Dist Ann Soc. Ent. Belg xlvn, p 58 (1903)

Pale ochraceous; posterior pronotal lobe reddish-ochraceous, with a large central pieceus spot, scutellum pieceus with its spine ochraceous; hemelytra and legs pale luteous, a spot on each lateral area of the sternal segments, sublateral area of the abdomen, apices of the femora, bases and apices of the tibiae (narrowly), and the tarsi black or pieceus, antennæ fuscous, base of first joint ochraceous, apices of pronotal lateral and scutellar spines fuscous; legs moderately pilose, posterior femora about as long as the abdomen; anterior lobe of pronotum obscurely centrally sulcate, and broadly, prominently foveate on each lateral area.

Length 12 millim.

Hab. Burma, Karennee (Fea)

B. Pronctal lateral spines about as long as pronotum.

1020. Polytoxus femoralis, Dist Ann. Soc Ent Belg xlvii, p 53 (1903)

Hend and pronotum reddish-ochraceous; posterior lobe of pronotum with a central fuscous or subpiceous spot; scutellum piceous, its spine ochraceous; hemelytra pale brownish-ochraceous, their lateral areas ochraceous; body beneath and legs ochraceous, abdomen sometimes castaneous, sublateral areas of the meso- and metasterna and abdomen piceous, extreme abdominal lateral margins luteous; antennæ, apices of femora, extreme bases of tibiæ, and the tarsi piceous, apices of the lateral pronotal and scutellar spines fuscous; legs pilose, posterior femora about reaching apex of abdomen; anterior pronotal lobe centrally sulcate, foveate on each lateral area, the sulcation and foveations strongly marginately carinate.

Length 10 millim. Hab. Ceylon (Green).

Apparently allied to *P longipes*, Stal, but differing, apart from other lesser characters, by having the posterior femora not passing the apex of the abdomen.

1021. Polytoxus fuscovittatus, Stål (Saica), Freg. Eug. Resa, Ins Hem p 262 (1859), id. (Acanthothorax) En. Hem. iv, p. 91 (1874).

Head and pronotum rufescent, the last with a broad piceous medial fascia; scutellum piceous, its spine luteous with a fuscous apex; hemelytra very pale fuscous or piceous, the lateral margins ochraceous; body beneath ochraceous, with a very broad piceous fascia on each lateral area of sternum and abdomen; legs ochraceous or brownish-ochraceous, apices of the femora piceous or fuscous, lateral pronotal spines luteous, their apices fuscous, directed upward and forward, about as long as pronotum

Length 7. to 8 millim.

Hab. Coylon (Lewis) Burma; Bhamo (Coll. Dist.).—Philippines (Semper).

Subfamily IV. TRIBELOCEPHALINÆ.

Tribelocephalma, St l, En Hem 1v, p. 4 (1874)

Ocelli none, body tomentose; antenniferous tubercles laterally prominent; first joint of antennæ incrassated, pronotum transverse; membrane very large

A small subfamily confined to the Old World, and possessing

only three genera, two of which are found in British India.

Synopsis of Genera.

A Head auteriorly produced in a porrect spine, first joint of rostrum not extending behind eyes

B Head obtuse, not anteriorly spinously produced, first joint of rostrum extending behind eyes TRIBELOCEPHALA, p 220

Орізтнорілтув, р 221.

Genus TRIBELOCEPHALA.

Tribelocephala, Stal, Ofv. Vet.-Al. Forh. 1853, p 263, id. Hem. Afr. 111 p. 160 (1805), id En Hem 1v, p 90 (1874)

Type, T. boschyesmana, Stål, an Ethiopian species Distribution. Ethiopian and Oriental Regions.

Body oblong, ovate; head oblong, its base moderately constricted, anteriorly spinously developed, antenniferous tubercles laterally prominent, ocelli absent, rostrum with the first joint about equal to the two apical joints together; antenne with the first joint incrassate, very little shorter than the head, second shorter than the first, remaining joints slender, indeterminate, pronotum transverse, narrowed from beyond middle, scutellum subtriangular; hemelytra a little shorter and narrower than the abdomen, the coriaceous portion small, elongate, occupying about half the length of hemelytra, membrane very large; legs short, anterior femora slightly incrassated.

A small genus at present containing four species, three of which are Oriental in distribution and are found in this fauna

1022. Tribelocephala indica, Walk (Opistoplatys) Cat. Het viii, p 20 (1873), Dist A. M. N. H. (7) 18, p 175 (1902).

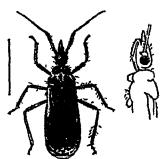


Fig 155 — Tribelocephala undica

Piceous or chocolate-brown, densely and more palely tomentose; membrane with the veins distinctly darker, rostrum, body beneath and legs a little paler in hue, head a little longer than the pronotum, head and pronotum moderately granulate, antennæ longly pilose

Length 11 to 13 millim

Hab North Bengal (Campbell, Brit Mus) Ceylon, Peradeniya (Green)

T lignea, Reut (Rev d'Ent vi, p 166, 1887), from Java, may probably prove to be conspecific with the above

Genus OPISTHOPLATYS.

Opistoplatys, Wester Zool Jouin v, p 447 (1884), Stal, Hem Afr. 111, p 160 (1865), id En Hem 1v, p 90 (1874)
Decius, Stal, Freg. Eug Resa, Ins Hem p 263 (1859)

Type, O. australasae, Westw., an Australian species.

Distribution. Oriental and Australasian Regions, also recorded from China

This genus is to be distinguished from the preceding (Tribelo-cephala) by the less produced and not spinously developed head, with the first joint of the antennæ either shorter, about as long, or slightly longer than the head; first joint of rostrum extending behind eyes

A genus at present containing about a dozen species, of which about half are found in the Oriental Region and two in this fauna

1023. Opisthoplatys majusculus, sp n

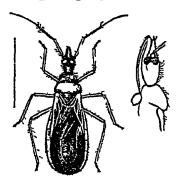


Fig 156
Omsthoplatys majusculus

Pale brownish - ochraceous, longly pilose: head and antenor lobe of pronotum fuscous inner area of corium between the veins and the membrane piceous, veins at base of membrane pale brownish-ochraceous, first joint of antennæ distinctly shorter than the head and about equal in length to second joint, head about as long as pronotum and scutellum together, hemelytra reaching the apex of abdomen

Length $11\frac{1}{2}$ to 16 millim Tavoy (Brit Mus).—China

Hab. Tenasserim (Coll Dist). (Brit Mus.)

1024 Opisthoplatys tenebiarius, Stôl En Hem iv, p 90 (1874)

Pale brownish, membrane fuscous, densely pilose; first joint of antennæ as long as head, second joint about as long as first, head a little longer than pronotum, membrane slightly passing abdominal apex veins to contain prominent and slightly paler, veins to membrane a little darker.

Length 8½ to 9 millim

Hab. Burma, Karennee (I'ea).—Java (Mus Leiden)

Subfamily V. STENOPODINÆ.

Stenopodina, Stål, En. Hem iv, p. 4 (1874).

Ocelli present; hemselytra each with a large areola occupying the basal area and part of the interior areas and reaching the membrane; interior area of the membrane truncated at base and shorter than exterior area; anterior tibus generally without a spongy furrow; head straight and porrect

The Stenopodinæ are universally distributed and are classified

in some 27 genera, of these 8 are included in this fauna.

Synopsis of Genera.

A. Apical spine to scutellum laterally produced, neither erect nor suberect a First joint of rostrum longer than two apical [p. 222. loints together
b First joint of rostrum not longer than two PYGOLAMPIS. apical joints together. a. Anterior femora with two series of small [p 224 spines beneath a'. Pronotum longer than broad b'. Pronotum about as long as broad Sastrapada. STACCIA, p 225 b. Anterior femora with a single series of spines, or unarmed [p 227 a' Anterior femora incressated and spined ONCOCEPHALUS, beneath b'. Anterior femora not incrassated, unarmed a2 Rostrum with first and second joints CAUNUS, p 238. equal in length 62. Rostrum with first joint about as long Diaditus, p 226. as two apical joints together B Apical spine to scutellum erect or suberect. a Rostrum with first joint not or very little longer than second, anierior lobe of prono-Tp 234. tum spined on each side; apex of fifth dorsal CANTHESANCUS, abdominal segment truncate b. Rostrum with first joint longer than second, anterior lobe of pronotum not spined on each side, apex of fifth dorsal abdominal seg-THODELMUS, p 235 ment spinously produced . .

Genus PYGOLAMPIS.

Pygolampis, Germ Faun Ins Eur p 8 (1817), Burm Handb 11, p 243 (1835), Any & Serv. Hêm p 391 (1843), Fieb Eur Hem. pp 41 & 150 (1861); Stâl, En Hem 1v, p 84 (1874), Saund Hem Het Brit Islds p 160 (1892)
Ochetopus, Hahn, Wanz Ins 1, p 176 (1891)
Stenopoda, Brullé, Hist Nat Ins, Hem p 324 (1835)

Type, P bidentata, Goeze, a Palæarctic species
Distribution Generally but sparingly distributed.
Elongate; head as long or nearly as long as the pronotum,

sides almost parallel from base to insertion of antennæ, laterally spinous behind the eyes, central lobe prominent; rostrum with the first joint longer than the two apical joints taken together; first joint of antennæ thickened, as long or nearly as long as the head; pronotum elongate, narrowed anteriorly, lateral margins straight, basal margin a little sinuate; anterior and intermediate legs almost equally long, posterior legs much the longest, posterior femora not reaching the abdominal apex; anterior coxæ contiguous, intermediate coxæ distinctly separated, posterior coxæ placed widely apart; anterior angles of prosternum produced in a porrect or curved spine.

1025 Pygolampis fæda, Stål, Öfv Vet.-Al. Forh 1859, p 379, En. Hem. 1v, p, 85 (1874)

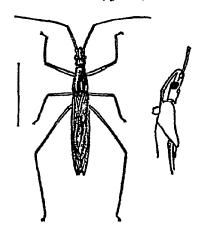


Fig 157 - Pygolampis fæda

Above thownish - ochraceous, beneath griseous; femora infuscated towards apex, anterior and intermediate tibiæ annulated with fuscous; mesosternúm with two central piceous vittæ, central lobe of head a little prominent; first joint of antennæ in Q distinctly longer than the head, in d about as long as head, basal joint of antennæ, femora and posterior tibiæ a little mottled with fuscous; pronotum with a longitudinal sulcation which is much wider behind.

Length 12½ to 16 millim.

Hab Ceylon, Peradenyia
(Green) Burma, Karennee.

Bhamo (Fea). Tenasserim; Malewoon (Fea)

1026 Pygolampis unicolor, Walk Cat. Het vm, p 36 (1873)

Pale ochraceous, sometimes very pale fuscous; apices of the femora, two basal annulations and apices of anterior and intermediate tibiæ, bases of posterior tibiæ, a very broad central fascia extending through meso- and metanota and abdomen beneath, and three longitudinal fasciæ on apical abdominal segment above dark fuscous-brown; veins to corium pale fuscous; in one specimen the head is fuscous and the pronotum pale ochraceous, in a second the head and pronotum are fuscous, first joint of antennæ about as long as pronotum and somewhat longly pilose, head a little shorter than pronotum, the anteocular portion faintly longitudinally ridged, the postocular portion obsoletely sulcate, anterior lobe of pronotum sulcate, posterior lobe with four discal carinæ, the central two continuous and diverging, the outer two shorter and nearly straight, lateral margins carinate, hemelytra and posterior femora not quite reaching abdominal apex.

Length 13½ to 14½ millim. Hab. North Bengal (Campbell).

Pygolampis concolor, Walk Cat. Het. viii, p. 37 (1873)

The type of this species is not now to be found, and without the types Walker's descriptions are as a rule undeterminable Moreover, he may have placed this species as a synonym of some other, without comment.

Genus SASTRAPADA.

Sastrapada, part , Amy & Serv. Hém p 388 (1843), Stâl, Hem Afr 111, p. 152 (1865), 1d En Hem iv, p 84 (1874) Harpagochares, Stâl, Öfv Vet.-Ak Forh 1858, p. 258 Ctenocnemis, Fieb Eur Hem pp 41 & 150 (1861)

Type, S flava, Amy. & Serv., from Java

Distribution. Palmarctic, Ethiopian, Oriental, and Australasian

Regions

Body elongate, narrowed anteriorly, head elongate, cylindrical, anteocular longer than the postocular portion, finely spinous underneath on each side behind eyes, which are rounded and semiglobose; antennæ short, first joint subequal to or shorter than head, rostrum with the first joint equal to, but not longer than, the two apical joints together, pronotum about twice as long as broad, broadest at base; scutellum acutely triangular; prosternum anteriorly spined on each side, legs moderate in length, anterior femora moderately incrassated, with two series of small spines beneath, anterior tibiæ shorter than anterior femora and unarmed

1027. Sastrapada baerensprungi, Stål (Harpagochares), Öfv VetAl. Forh 1859, p 381, Dist

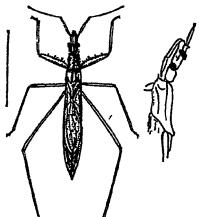


Fig 158 - Sastrapada baerensprungi

At Porn 1809, p 381, Dist A. M. N. H (7) x, p 177 (1902) Sastrapada femorata, Costa, Addit. p 12, t 11, f 2

Ctenocnemis flavescens, Fieb Eur Hem p 150 (1861) Sastrapada incerta, Sign Ann Soc Ent Fr 1860, p 968, Stål, Hem. Afi 111, p 152

Stål, Hem. Afi 111, p 152 (1865) Sastrapada bipunctata, Walk

Cat Het viii, p 28 (1878)
Pygolampis innotata, Walk
Cat Het viii, p 36 (1873)

Pale ochraceous, a small discoidal spot to hemelytra and minute lateral abdominal spots black, anterior coxe, some mottlings or suffusions

to anterior femora, apex and sometimes subbasal annulation to

STACCIA 225

anterior tibiæ, lateral areas of head, disk of sternum, and sometimes two narrow central fasciæ to abdomen piceous, liead a little shorter than pronotum; first joint of antennæ a third part shorter than head; hemelytra shorter than abdomen.

Length 14 to 18 millim.

Hab. Ceylon; Peradenyia (Green) — Southern Palæarctic Region; South Africa; Madagascar, Bourbon, Mauritius; Malayan Archipelago; Timor.

Genus STACCIA.

Staccia, Stal, Hem. Afr. 111, p 150 (1865), id En. Hem 1v, p 84 (1874)

Type, S. diluta, Stal.

Distribution. Oriental and Ethiopian Regions.

Body moderately elongate; pronotum about equally long and broad; anteocular portion of head armed with a long spine on each side, anteocular longer than postocular portion of head; prosternum anteriorly armed with a long spine on each side; anterior femora incrassated and with two series of strong spines beneath; rostrum with the first joint longer than second, but not longer than second and third together.

1028. Staccia diluta, Stal (Oncocephalus), Freg Eug Resa, Ins Hem p 263 (1859)

Ochraceous, eyes black; lateral margins of pronotum sometimes

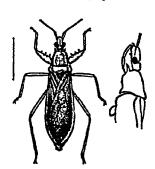


Fig 159 - Staccia diluta

dark fuscous as in specimen figured, but this character is sometimes obsolete; first joint of antennæ shorter than head, about as long as anteocular portion, margins of postocular area rounded, narrowed posteriorly; pronotum with the anterior and posterior lateral angles tuberculous, anteriorly the prosternal spines visible from heneath; pronotum transversely impressed at about one-third from base, the anterior lobe slightly globose; hemelytra reaching abdominal apex in male, but not in female, and with a

large cell at inner margin. Length 8 to 10 millim

Hab. Ceylon (Green). Burma; Bhamo, Teinzo, Rangoon (Fea).—Philippines

1029 Staccia? plebeja, Stål, Beil ent Zeitschr x, p 166 (1866)

Pale testaceous-fulvescent; apices of the posterior femora somewhat testaceous. Allied to S. diluta, but with the head more incrassated, and with the anteocular portion of the head beneath VOL II.

without the long spines; the anterior femora are also without the long spines beneath.

Length 81 millim. Hab. Ceylon (fide Stal)

I have not seen this species, which from the above characters can scarcely belong to the genus Staccia. In fact, Stal himself, who at the time of writing his fourth instalment of his 'Enumeratio Hemipterorum' had not the type before him, placed it in his 'Species Stenopidinorum incerti generis.' I have thought it best, however, to record the species in this place.

Genus DIADITUS.

Diaditus, Stal, Ofv Vet.-Al., Forh 1859, p. 383; td. Hem. Afr. 11, p. 150 (1865), td En Hem 11, p. 124 (1872), Champ. Biol Centr.-Am, Rhynch. 11, p 188 (1898).

Type, D semicolon, Stall, a Neotropical species. Distribution. Neotropical and Oriental Regions.

Body oblong, narrowed anteriorly, head cylindrical, anteocular portion a little longer than the postocular, antenniferous tubercles prominently subspinously produced, with two porrect spines between them; antenno with the first joint shorter than the head; rostrum with the first joint about as long as the two apical joints together, legs slender, anterior femora a little incressated, posterior femora not or nearly reaching abdominal apex; scutellum with a horizontal apical spiniform process

In the Ceylonese species here included, the antenne are peculiar in having the third joint very short and subnodulose, a character not exhibited in the American species as at present known

1030. Diaditus errabundus, Dist Ann Soc Ent Belg 1903, p 54

Houry grey, streaked and suffused with fuscous; head with the eyes black, and with a distinct central pieceous line on the postocular area; pronotum with longitudinal fuscous lines, the central



Fig 160 Diaditus errabundus

area a d base more or less piccous, scutellum piceous; conum with longitudinal fuscous streaks, two small fuscous discal spots connected by a line of the same colour, and with pale greyish suffusions which extend also to the membrane, connexivum alternately fuscous and grey, legs pale ochraceous annulated with fuscous; an oblique black fascia crossing meso- and metasterna near the coxe, abdomen with a central incised line which is black on the last two segments; head distinctly tuberculously spinous at the antenniferous tubercles, between which the apex of the head is bispinously produced; antennæ pale with the basal and apical joints fuscous,

pronotum broadly longitudinally sulcate, postorular area of head medially less broadly sulcate.

Length 10 millim

Hab. Ceylon, Kuruvegalla and Peradeniya (E E Green)

The first Eastern species described belonging to this hitherto purely Neotropical genus

Genus ONCOCEPHALUS

Oncocephalus, Kluq, Symb Phys nº (1830), Stal, Hem Afr ni, p 155 (1865), Fieb Ew Hem pp 42 & 151 (1861), Reut Monogn, Act Soc Sc Fenn vii, p 675 (1883)
Spilalonius, Stâl, En Hem ni, p 123 (1872)

Subg Beebius, Stal, Hem Afr in, p 123 (1812)

Type, O. notatus, Klug.

Distribution. Nearctic, Palmarctic, Ethiopian, Oriental, and

Australasian Regions

Body oblong or moderately elongate; head cylindrical, shorter than the pronotum, anteriorly armed between the antennæ with two small spines which are sometimes very indistinct, postocular portion short; antennæ with the first joint a little shorter than the head; pronotum with the anterior angles acutely prominent; scutellum with the apex laterally spinose; prosternum anteriorly bispinose; anterior femora incrassated, beneath finely spinose

A Hemelytra fully developed.

a Anteocular and postocular areas of head almost equal in length.

1031. Oncocephalus notatus, Klug, Symb Phys ne, pl xxx, f 1 (1830), Reu' Act Soc Sc Fenn xn, p 740, pl nu, f 45 (1883)

Ochraceous; a large spot on postocular area of head, three

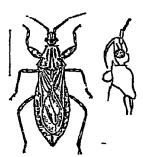


Fig. 161
Oncocephalus notatus

vittæ to anterior lobe and five to posterior lobe of pronotum, spots to connexivum above and beneath, head beneath, lateral areas of sternum, a broad submarginal tascia to abdomen beneath, spots and other markings to anterior femora, annulations to intermediate and posterior femora and tibiæ, cell at inner angle of corium, and a discal oblong spot to membrane piceous or fuscous, head with the anterior angles laterally spinously prominent, lateral margins sinuate, posterior

lateral angles rounded, centrally sulcate on disk; hemelytra in female not reaching apex of abdomen

Length 10 to 10} millim

Hab. Kashmir (Hugel, Vienn Mus), Bor Ghát (Divon) —Described by Klug from 'Arabia deserta"

1032. Oncocephalus naboides, Wall. (Pirates) Cat. Het vu, p. 121 (1873), Dist. A. M. N. H. (7) xi, p. 257 (1903)
Oncocephalus pilosus, Reut. Act. Soc. Sc. Fenn. xii, p. 735, pl. ii, f. 42 (1883).

Pilose, ochraceous; head, antennæ, three longitudinal fasciæ to anterior pronotal lobe, scutellum, spots to connexivum above and beneath, streaks to anterior femora above, annulations to anterior tibiæ, and intermediate and posterior femora and tibiæ fuscous, abdomen beneath laterally broadly very pale fuscous on each side; head short, thick, with two black spots at the area of the occili, anteocular and postocular portions almost equal, antennæ longly pilose, pronotum profoundly sinuate at anterior margin; rostrum with the first joint slightly shorter than the second

Length 11 to 11½ millim.

Hab. "Hindustan" (Brit Mus.) "North India" (Coll.

Signoret).

Some confusion is likely to arise around this species. Walker (op cit. viii, p 27, n 17) also described a species from Ceylon under the name of Oncocephalus nabindes, the type of which cannot now be found, and which I therefore, in consideration of Walker's method of describing, propose to treat as non-existent Lethierry and Severin have included the last description in their Catalogue (t 111, p 87), and the name can remain, but the reference must be corrected. For the opportunity of seeing a specimen identified as O pilosus in Signoret's collection, now in the Vienna Museum, I have to thank Dr. A. Handlirsch

1033 Oncocephalus picturatus, n. sp

Ochraceous; a spot on each side of anteocular portion of head and the area of the ocelli, irregular mottlings to anterior lobe and a subtriangular central fascia, a fascia to each lateral margin of posterior lobe of pronotum, scutellum, spots (alternately large and small) to connexivum above and beneath, mottlings and two apical annulations to anterior femora, three or more annulations to intermediate and posterior femora, three annulations to anterior and intermediate tibiæ, basal annulation to posterior tibiæ, proand mesosterna and lateral areas of metasternum piceous or black, abdomen beneath with two linear longitudinal pale fuscous fascus on each lateral area, antenna pilose, first joint about as long as head, apex of second joint fuscous (remainder mutilated in specimen described), head with the anteocular area to base of antennæ about equal in length to the postocular area, pronotum with the anterior and posterior lobes almost equal in length, the anterior and posterior angles shortly dentate, legs pilose; posterioi tibie a little longer than posterior femora

Length 12½ millim. Hab Burma, Rangoon (Atkinson, Brit. Mus)

- b. Anteocular portion of head longer, but not twice the length of postocular portion
- 1034. Oncocephalus fuscinotum, Reut Act Soc Sc Fenn xii, p 731, pl 11, f. 79 (1883)

Head, pronotum, scutellum, and body beneath fuscous; hemelytra brownish-ochraceous; rostrum, legs and apex of scutellum luteous; a testaceous spot behind each eye; apical areas of femora, and somewhat obsolete medial annulations to same, basal, medial, and somewhat obsolete apical annulations to tibue and base of rostrum castaneous, membrane mottled with paler coloration, antennæ with the first and second joints castaneous (remainder mutilated in typical specimen), first joint slightly shorter than anteocular portion of head, which is longer than postocular portion, but not twice as long, anterior and posterior lateral angles of pronotum obtuse; connexivum spotted with luteous above and beneath

Length 11½ millim.

Hab. Lahore (Hugel, Vienna Mus.)

1035. Oncocephalus impudicus, Rent Act Soc Sc Fenn. xii, p. 715. pl. ii, ff 26 & 27 (1883).

Ochraceous; eyes black; antennæ, legs and abdomen beneath luteous, pronotum with the lateral margins and three fasciæ to anterior lobe fuscous: a central spot to clavus, interior cellular area to corium, a small spot behind it, and a variably long irregular spot in outer cellular area of membrane castaneous; head beneath, sternum, anterior and posterior femora, apices of intermediate femora, three annulations to tibiæ (sometimes only basal and apical to posterior tibiæ), and lateral areas and apex of abdomen fuscous-brown; apex of first antennal joint a little fuscous, apex of third joint black; anteocular portion of head almost twice as long as postocular portion, anterior and posterior lateral angles of pronotum prominently subspinous; apical spine to scutellum long, acute; first and second joints of rostrum subequal in length.

Var Corium with a castaneous linear and subclaval and a small triangular spot in front of the interior cellular area to corium.

Length 12 to 13 millim.

Hab. Bengal. Calcutta (fide Reuter). Tenasserim Valley, Mytta (Doherty)—Also found in Java, Sumatra, Borneo, and Philippine Islands.

- c Anteovular portion of head twice or more than twice the length of postocular area.
- 1036. Oncocephalus modestus, Reut Act Soc Sc Fenn x11, p. 716 pl. 11, f 28 (1883)

Pale cinnamon-brown; membrane with a discal elongate

castaneous spot; an inner angular cellular spot to corium and a smaller following spot dark cannamon-brown; rostium, under surface of head, prosternum and legs luteous, apical half of rostrum, lateral areas of head and sternum, apices of posterior femora, semi-annulations to tibis, and speckles to anterior femora pale fuscous. Alked in structure to 0. impudicus head more elongate, lateral posterior angles of pronotum much more obtuse, apical spine to scutellum shorter, more robust, less acute and slightly recurved at apex; first joint of antennæ shorter, scarcely longer than anteocular portion of head.

Length 12 millim.

Hab. Calcutta (Stockholm Mus.). Ceylon (Vienna Mus.).

1037 Oncocephalus lineosus, sp n

Piceous-brown; a broad lateral and a narrow central fascia to anteocular portion of head, and a curved linear spot behind eyes. six longitudinal linear fasciæ to pronotum (of which the sublateral are abbreviated), a central line and apex to scutellum, two exterior longitudinal veins to corium, connexivum, body beneath, rostrum and legs pale ochraceous; lateral margins of prosternum, oblique fascus on meso- and metasterna, two longitudinal fascus on each lateral area of the abdomen, longitudinal lines to anterior femora, apices of intermediate and posterior femora, two basal annulations to anterior and intermediate tibiæ and an obscure basal annulation to posterior tibiæ piceous; antennæ pale ochraceous, apex of first and second and the whole of the remaining joints piceous, first joint as long as from insertion to posterior margin of eyes, head with the anteocular area from eyes to base of antennæ much longer than the postocular area; pronotum with the anterior angles tuberculously prominent, posterior angles subprominent; posterior tibue slightly longer than posterior femora

Leugth 12 millim.

Hab. Ceylon, Maskeliya (Green)—Singapore (Ridley, Brit.

Mus.).

1038. Oncocephalus klugi, sp n

Pale brownish-ochraceous; a large central spot to postocular area of head black, lateral areas of head, three longitudinal strice and two short oblique strice on each lateral area of anterior pronotal lobe, central cellular areas to the coriaceous and membranaceous areas of hemelytra, and a small spot beyond the first, lateral margins and a sublateral linear fascia to abdomen beneatl, and annulations to anterior tibice pale brownish-castaneous; apex of scutellum luteous; antennæ ochraceous, first joint about as long as from its insertion to eyes, head with the anteocular area from eyes to base of antennæ about twice as long as postocular area; pronotum with the lobes about equal in length, the posterior lobe centrally broadly impressed, anterior angles obtusely tuber-

culously prominent, posterior angles subprominent; posterior tibiæ a little longer than posterior femora.

Length 16 millim.

Hab. North India (Coll. Signoret). Burma; Bhamo.

1039. Oncocephalus cingalensis, Walk Cat. Het. vin, p 26 (1873);

Dist A M N H. (7) x, p 178 (1902)

Ferruginous; pronotum with two transverse ochraceous apots at base, a somewhat large subquadrate fuscous spot at inner angle of corium; legs ochraceous, spotted and angulated with fuscous. lateral margins of head and pronotum, a central fascia to head, scutellum and small spots to connexivum above and beneath fuscous; antennæ pilose, first joint about as long as anteocular portion of head, which is twice as long as postocular portion (not thrice as long as described by Walker), pronotum elongate, the anterior and posterior lateral angles distinctly subspinously produced, anterior lobe finely centrally sulcate; rostrum with the first joint slightly shorter than second in the female the hemelytra do not reach the abdominal apex.

In a Bornean male specimen the first and base of second joint of rostrum and anterior and posterior areas of prosternum are

luteous

Length 15 to $18\frac{1}{2}$ millim.

Hab "India" (Brit. Mus). Ceylon (Thwaites)—The British Museum also contains specimens from Singapore, Sandakan, and from Adelaide River, Australia.

Oncocephalus annulipes, Siâl, Ofi Vet -Al. Forh 1855, p. 44,
 id. Hem Afr. 111, p 158 (1865); Reut Act Soc So Fenn x11,
 p. 706, pl. 1, f 18 (1883), Diet A M. N H (7) x, p 178 (1902).
 Oncocephalus cingalensis, Kirby (nec Walk.), Journ Linn Soc,

Zool xxiv, p 117 (1891).

Very pale brownish-ochraceous, two annulations to first joint of antennæ, four obsolete lines on anteocular portion of head and a large medial spot on postocular portion, rostrum beyond middle, three indistinct longitudinal fasciæ on anterior area of pronotum lateral areas of scutellum, a central streak to clavus, a posterior oblong subclaval spot, with a much smaller outer spot, and a large subquadrate spot in inner areola to corium, a small basal and a large discal elongate spot to membrane, marginal spots to abdomen, irregular spots to sternum, apical areas of intermediate and posterior femora, three annulations to anterior tibiæ base, apex, and subbasal annulations of intermediate and posterior tibiæ, and apices of the tarsi dark fuscous or black; anterior femora variably marked with fuscous, anteocular more than twice the length of postocular portion of head; first joint of antennæ as long as anteocular portion of head; lateral margins of pronotum armed medially with a small tubercle or tooth.

Length 14 to 24 millim.

Hab. Kashmir (Hugel). Bombay (Leith) Bor Ghát (Dixon). Ceylon (Green). Burma; Karennee (Fea) Tenasserim; Meetan

(Fea).

Stal identified this species, which he described, as from Caffraria, Sierra Leone, Philippines, Australia, and New Caledonia. The British Museum also contains specimens from Ceylon, Singapore, Java, Borneo, and East Africa. I took the species in the Transvaal. Some recent writers-Reuter, Lethierry, and Severinhave regarded it as confined to South Africa; but this seems quite a mistake.

1041. Oncocephalus schioedtei, Reut Act Soc Sc. Fenn. xii, p 702

Pale brownish-ochraceous; basal joint of antennæ biannulated with fuscous; head with a prominent black spot on disk behind eyes, the lateral areas fuscous; pronotum with two central longitudinal lines, which are fused on anterior lobe, two more obscure and waved lines on each lateral area, and the lateral margins fuscous; scutellum fuscous, with a central fascia (not reaching base) ochraceous; corium with a posterior subclaval elongate spot, a cellular subquadrate spot near inner angle, a very small spot almost between them, and a large discal elongate spot to membrane cinnamon-brown, with their margins greyish; second joint excluding base and remaining joints of rostrum, oblique lateral areas of meso- and metasterna, apices of intermediate and posterior femora, longitudinal lines on under surface of anterior femora, basal, central and apical annulations to anterior tibie, subbasal annulations to intermediate and posterior tibie, and their extreme apices fuscous, anteocular about twice the length of postocular area of head; first joint of antennæ about as long as head, anterior and lateral angles of pronotum distinctly acutely prominent.

Length 16 to 21 millim.

Hab. Bengal; Serampore (Copenhagen Mus). Tenasserim;

Victoria Point (Brit Mus).

This species may be recognized by the subscute anterior and posterior angles of the pronotum.

B. Hemelytra abbreviated.

B. Pronotum with a spinous tubercle on each side near middle.

1042. Oncocephalus micropterus, Horv Term Füzetek, xii (1), 1889, p. 37.

Pale testaceous; lateral lines and a central postocular spot to head, a central longitudinal fascia to pronotum, scutellum (excluding apex of spinous prolongation), a spot at spex of each abbreviated hemelytron, apical area of rostrum, apices of femors, OAUNUS 233

three annulations to tibiæ (somewhat obsolete on posterior tibiæ) dark fuscous or black; head with the anteocular much longer than the postocular portion, antennæ ochraceous, base of first joint stramineous, apex of second joint fuscous, remaining joints mutilated in typical specimen, first joint a little longer than anteocular portion of head, hemelytra very short, about twice as long as scutellum, their apices rounded; pronotum with the anterior lobe much longer than the posterior, its anterior and posterior angles tuberculously prominent and with a spine on each lateral margin of anterior lobe behind middle.

Length 151 millim.

Hab Himalaya (Budapest Mus.)

I have seen the type of this species by the courtesy of Dr. Horvath.

b Pronotum without lateral median spines.

1043. Oncocephalus morosus, sp n

Dark fuscous, greyishly sericeous; base of first joint of antennæ, basal two-thirds of intermediate femora, two broad annulations to anterior and intermediate tibiæ, posterior tibiæ (excluding two obscure basal annulations), and an angular spot on under surface of anterior femora luteous; antennæ with the first joint about as long as from insertion to eyes; head broad and robust, anteocular much longer than postocular area; pronotum with the anterior lobe much longer than the posterior, which has two distinct central curved carinæ, hemelytra abbreviated, only reaching the second abdominal segment, their apices rounded, and containing a small fuscous spot near apex.

Length 20 millim.

Hab. Sikhim; Mungphu (Atkinson, Brit. Mus.)

Genus CAUNUS.

Caunus, Stål, Hem Afr. 111, p. 153 (1865); id En Hem 1v, p. 84 (1874), Rent Act Soc Sc Fenn x11, p 750 (1883)

Type, C. capensis, Stal, a South-African species. Distribution. Ethiopian and Oriental Regions

Allied to Oncoephalus, but with the anterior femora not incrassated, head between antennæ produced into two porrect spines, anteocular portion longer than postocular; rostrum with the first and second joints equal in length, pronotum deflected from a little beyond base, longitudinally carinate and sulcate; lateral margins of the prosternum moderately crenulate, anterior spines porrect; tibiæ shortly pilose

1044. Caunus farinator, Reut. Act Soc. Sc. Fenn x11, p 752, pl 111, f 55 (1883)

Palely greyishly testaceous; central sulcation to pronotum,

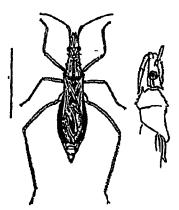


Fig. 162 - Caunus farmator

small elongate interior vitta to corium, irregular markings to membrane, femora, lateral areas of sternum and abdomen, the last with an inner series of small elongate spots, and apical joints of rostrum and antennæ fuscous, hemelytra in lemale not reaching the abdominal apex, head about as long as the pronotum, which has a broad central sulcation, on each side of which on anterior area it is carinate and finely sulcate

> Length 164 millim. Hab Tranquebar.

I am indebted to Dr. Meinert, of the Copenhagen Museum, for the opportunity of examining and figuring this species.

Genus CANTHESANCUS

Canthesonous, Amy. & Serv. Hem p. 389 (1843), Sidl, Hem Afr 111, p 151 (1865); id En Hem 1, p 85 (1874)

Type, C trimaculatus, Amy. & Serv., a Javan species

Distribution Oriental Region and China

Hemelytra complete, membrane and corium distinctly separated. the first with a large subtriangular discoidal area; interior area of the membrane shorter than the exterior area, scutellum with a long erect spine, jostrum with the first joint not or very little

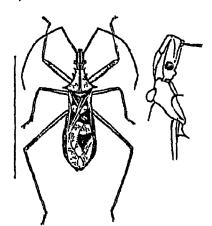


Fig 163 - Canthesancus gulo

longer than the second, anterior lobe of the pronotum posteriorly with a spine on each lateral margin, fifth dorsal segment of the abdomen with its apex truncated, its apical angles not spinous

1045. Canthesancus gulo, Stål, Ann. Soc Ent F. 1863, p 44

Head, pronotum and scutellum griseous-ochraceous; hemelytra brownish-ochraceous, a central black line to head continued through pronotum; pronotal spines fuscous; basal half of clavus, and three irregular spots to hemelytra—the first smallest and subbasal, the second large and transverse at junction of corium and membrane, the third on disk of membrane—pale castaneous; the hemelytra are finely mottled with brown excepting at basal angle of corium, apical areas of femora and apices of tibiar fuscous, antennæ black, bases of first and second joints pale ochraceous, first joint about as long as pronotum and scutellium together.

Length 27 to 29, breadth between pronotal angles 7 millim Hab Sikhim Assam, Margherita (Doherty). Burma; Rangoon (Fea)—Malay Peninsula

1046 Canthesancus helluo, Stal, Ann Soc Ent Fi 1803, p 44

Somewhat closely alhed to C gulo, but first joint of antennæ a little longer than pronotum and scutellum together, tibiæ with the bases and apices fuscous, the anterior and intermediate tibiæ with two or more less distinct medial annulations, and the posterior tibiæ with a single subbasal annulation, fuscous, rostrum pale ochraceous, with its apex fuscous

Length 25 to 28; breadth between pronotal angles 7½ millim

Hab Nilgiri Hills (Hampson) Ceylon (Brit Mus)—Borneo
(Shelford)

In the specimen from the Nilgiri Hills the bases of the tibine are not fuscous

1047. Canthesancus picticollis, Stal, En Hem IV, p 89 (1874)

Described by Stal as differing from the two preceding species, to which it is much allied, by having the antennæ pale ochraceous, the apex of the first joint black, the apices of the pronotal and scutellar spines pallescent, posterior pronotal lobe black, with four testaceous vitiæ, the two lateral anteriorly confluent.

Length, Q, 27; breadth 5 millim

Hab "India orientalis" (Stockholm Mus)

Genus THODELMUS.

Tholdelmus, Stal, Öfv Vet-Ak Fork 1859, p. 377 ad Hem Afrin, p 150, ad En Hem iv, p 85 (1874)

Type, T. fallem, Stål.

Distribution. Ethiopian, Oriental, and Australasian Regions.

Thodelmus differs from the preceding genus (Canthesancus), to

which it is much allied in general structure and appearance, in having the first joint of the rostrum distinctly longer than the second, and the anterior lobe of the pronotum posteriorly without a spine on each lateral margin; fifth dorsal segment of abdomen with its apex angulately and spinously produced.

1048. Thodelmus falleni, Stål, Öfv. Vet -AL Förh 1859, p. 378,

Dist A M. N. H (7) v, p 179 (1902).

Stenopoda hastata, Walk Cat Het viii, p 32 (1873).

Cunnamon-brown; a central and lateral fascia on each side of

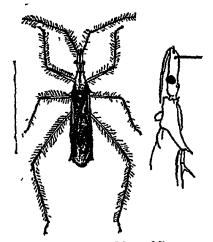


Fig. 164 — Thodelmus falleni

head, apices of first and second joints of antennæ, lateral margins and a central line to anterior lobe of pronotum and apices of femora and tibim black, lateral margins of corrum, apreal spine to seatellum, posterior pronotal lateral spines, legs, apex of rostrum and anal segment of abdomen luteous; abdomen beneath and an oblique fascia on each side of sternum beyond coxe testaceous, head a little longer than pronotum, with a distinct spine on each side at apex, antennæ pilose, first joint about as long as head; pronotum very finely

granulate, hemelytra finely mottled with ochraceous; legs somewhat longly pilose.

Length 21½ to 24 millim.

Hab Bombay. Nilgiri Hills (Hampson). Ceylon; Peradeniya (Green) Burma; Toungoo (Fea)

Subfamily VI. SALYAVATINÆ.

Salyavatına, Stâl, En Hem. iv, p 4 (1874).

Hemelytra without the large areola as in the Stenopodium; interior area of membrane longer than exterior area, anterior tibize generally with a spongy furrow; scutellum subtriangular, its apex spinously produced; anterior tarsi two-jointed

A small subfamily containing some six genera, nearly all of Old World distribution, and of which three are now known to form

part of this fauna.

Synopsis of Genera.

A Head porrectly produced between antenmferous tubercles
a Anterior tibize simple
B Head not porrectly produced between antenniferous tubercles
b Anterior tibize apically compressed and ampliated
c. Anterior tibize strongly dilated on each side

PFTALOCHIRUS, p 240

Genus LISARDA

Lisarda, Stål, Ofv Vet -Al. Forh 1859, p 192, ad. Hem Afr. in, p 147 (1865), ad En. Hem 1v, p 81 (1874) Subg Œnusa, Stål, En Hem 1v, p 82 (1874)

Type, L rhypara, Stål

Distribution. Oriental and Ethiopian Regions.

Head oval, distinctly narrowed behind eyes, and anteriorly between the antenniferous tubercles distinctly and prominently produced; antennæ with the first joint about as long as the head or a very little longer, a little shorter than the second, rostrum with the first joint longer than the second; pronotum transversely constricted before the middle; scutellum with the apex spinously produced; legs moderately long, posterior coxe not very wide apart, anterior femora very moderately thickened

A. Apical process to head porrect, apical segmental angles to connection not spinoùs

a. Apreal spine to scutellum short, obtuse, robust.

1049. Lisarda annulosa, Stål, En Hem iv, p 83 (1874)

Brownish-ochraceous; base and annulation to second joint of



Fig 165 —Lisarda annulosa

antennæ, mottlings to hemelytra and abdomen, connexivum and legs luteous, subocellate spots to connexivum, head beneath, sternum, a broad macular fascia on each side of abdominal disk joining a spot on apical segment, and a few small linear central spots dark fuscous or castaneous; tibiæ and femora annulated with fuscous; apical prolongation to head porrect; femora with an obscure spine near apex, the anterior

femora also medially spined beneath; posterior lateral pronotal

angles obtusely prominent; apical spine to scutellum short, obtusely robust.

Length 11 millim.

Hab. Sylhet (Coll. Sign.). Ceylon (Green) Burma, Karennee.

1050. Idsarda uniformis, Dist Ann Soc Ent. Belg 1903, p. 55

Pale ochraceous; eyes, pronotum, scutellum, sternum, a central narrow line and a broad slightly curved fascia on each lateral area of the abdomen plumbeous; lateral areas of the posterior pronotal lobe pale ochraceous; anterior lobe of the pronotum profoundly excavate, a central narrow sulcation traversing both lobes, anterior angles prominent and plumbeous, posterior lateral angles obtusely prominent, a little recurved; connexivum very obscurely or obsoletely spotted with darker ochraceous; legs uniformly concolorous, not annulated, apical spines to scutellum short, obtuse, robust, laterally oblique; femora spined as in preceding species.

Length 10 to 12 millim. Hab. Ceylon (Green)

b Apical spine to seutellum slender, obliquely suberect

1051. Lasarda recurva, sp n.

Closely allied to L. annulosa, but differing in the posterior pronotal angles which are acutely produced and strongly recurved, the apical spine to scutellum is also long, acute, obliquely sub-erect; the dark spots to connexivum are transversely inear, and not subocellate; the hemelytra are much less motiled with luteous

Length 10 millim.

Hab Burma, Karennee (Fea).

1052. Lisarda rhypara, Stål, Ofv. Vet Ak Fork. 1859, p 192,
Reut Act Soc Sc Fenn. xin, p 337 (1881); Diet A.M N. H

(7) x, p 179 (1902)
Reduvius argillaceus, Walk Cat Het vii, p 195 (1873)

Head above, pronotum, scatellum and sternum fuscous, hemelytra, abdomen beneath and legs brownish-ochraceous; antennæ ochraceous, apex of second joint fuscous; apices of femora and an upper spot at bases of tibiæ castaneous; a lateral femora and an upper spot at bases of tibiæ castaneous; a lateral vitta on each side of abdomen and a darker and more distinct vitta on each side of abdomen and a darker and more distinct central line fuscous; anterior prolongation to head porrect, central line fuscous; anterior prolongation to head porrect, lateral pronotal angles short, acute, recurved; apical spine to scutellum slender, acute, obliquely suberect

Length 11½ to 14 millim.

Hab. Burma (Coll Dist.). Tenasserim (Brd. Mus).—Penang.

Java

239

c. Apical spine to scutellum acute, almost perpendicular.

1053. Lisarda erecta, sp n.

Fuscous; hemelytra and abdomen beneath finely mottled with ochraceous; small luteous marginal spots to connexivum; legs ochraceous, annulated with fuscous, much as in the two preceding species; posterior lateral pronotal spines black, short, subacute, slightly recurved; apical spine to scutellum black, acute, almost perpendicular, a little recurved from beyond base; femora spined as in the preceding species.

Length 10 millim.

Hab Burma (Coll Dist)

B. Apical process to head recurved; apical segmental angles to connexivum spinous.

1054 Lisarda longispina, Dist Ann. Soc. Ent Belg. 1903, p 54.

Fulginous-brown, autennæ, apical spine and a lateral fascia on each side of head above, two longifudinal discal fasciæ on auterior lobe of pronotum and its posterior margin in front of scutellium, connexivum, coxæ, legs and abdomen beneath ochraceous, base and apex of second joint of antennæ, apex of scutellar spine, and anterior and lateral angles of pronotum piceous; large incomplete spots to connexivum; apical areas of femora sometimes exhibiting two obsolete annulations, basal, subbasal and apical annulations to tibiæ umber-brown, abdomen beneath mottled with fuliginous, and with a central piceous macular line; rostrum pale brownish; apical prolongation of head long and recurved; lateral angles of pronotum long and directed backward; lateral spines to connexivum somewhat long and very distinct

Length, Q, 16 millim. Hab Burma; Karennee

Genus VALENTIA.

Valentia, Stål, Hem Afr 111, p. 144 (1865), id En Hem. iv, p 81 (1874)

Type, V. apetala, Vuill.
Distribution Oriental Region

Rostrum with the first joint equal to or slightly shorter than the second; head between eyes not porrectly produced, antenuæ with the first joint longer than the head; anterior femora straight; anterior tibia not dilated but anteriorly compressed and ampliated, the apex broad, femora with a very distinct spine beneath near apices; prosternum anteriorly with two tubercles, posterior pronotal angles and apex of scutellum longly erectly spinous; connexivum with the posterior angles of the segments somewhat longly spinous

1055. Valentia apetala, de Vuill (Petalocherrus) Ann. Soc Ent Fr 1864, p 142, pl i, f. 10; Stål, En Hem 1v, p 82 (1874), Dist A M N. H (7) x, p 180 (1902).

Lisarda javana, Mayr, Veih z-b Ges Wien, xv, p 487 (1865), 1d Reise Novara, Hem p 148, f 38 (1866). Petalochurus funestus, Walk Cat Het vm, p 9 (1873).

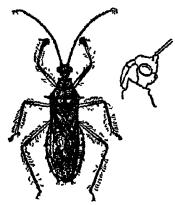


Fig 166 - Valentia apetala

Head, pronotum, scutellum, rostrum, sternum and come fuscous. hemelytra, abdomen beneath and legs brownish-testaceous. a small rounded spot on inner margin of corrum, spots to connexivum, basal areas of femora and subbasal annulations to tibiæ luteous or ochraceous; antennæ with the first joint ochraceous, its apex fuscous, second joint fuscous, its apex ochraceous, anterior area of head and the pronotum centrally finely sulcate, lateral pronotal spines a little obliquely upwardly directed; spines to connexivum backwardly directed;

anterior tibise apically compressed and thickened for about onethird of their length; apical spine to scutellum long, erect

Length 17 to 18 millim. Hab Sylhet (Brit. Mus.) .- Malay Peninsula; Siam; Java

1056. Valentia compressipes, Stal, En Hem iv, p 82 (1874)

Allied to the preceding species (V. apetala), and differing by the anterior tibiæ which are compressed and ampliated for nearly their whole length, but very much broader at apea than at base; hemelytra much mottled with ochraceous, legs brownish-ochraceous, interior pale spot to corium subobsolete, autennæ with the first joint ochraceous, remaining joints fuscous, abdomen beneath pale ochraceous with a central discal fuscous line

Length 161 to 18 milim. Hab Burma; Palon, Bhamo, Karennee, Temzo (Fea), Rangoon (Brit Mus.) Tavoy (Brit Mus).

Genus PETALOCHIRUS.

Petalocherrus, Pul. Beauv Ins p 13 (1805) Petalochirus, Burm Handb n, p 246 (1885), Stal, Hem Afr nı, p 144 (1865), ıd. En Hem 1v, p. 81 (1874) Subg Platychırıa, Hen -Schaff Wanz Ins 1x, p 93 (1853)

Type, P variegatus, Pal Beauv., an Ethiopian species Distribution Ethiopian and Oriental Regions. Oblong-ovate; head deflected in front of eyes, antenniferous

tubercles slightly prominent, eyes very prominent; rostrum with

the first and second joints about equal; antennæ with the first joint longer than the head; pronotum constricted before the middle, anterior lobe much narrower than the posterior lobe, anterior and posterior lateral angles spinous; scutellum with its apex spinous; connexivum with the posterior segmental angles more or less spinous; legs moderately long, anterior femora slightly thickened, anterior tibue strongly dilated on each side for their whole length, their apices above longitudinally impressed, prosternum anteriorly armed with two long porrect spines

1057. Petalochirus brachialis, Stål, Öfo Vet -Al. Foil. 1858, p 444

Brownish-ochraceous, hemelytra much mottled with luteous;

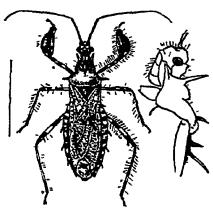


Fig 167.—Petalochirus brachialis

head, anterior lobe of plonotum, scutellum, body beneath, rostrum and legs fuscous, apical areas of spines to pronotum, apex of scutellum and margins of connexivum, two small spots between eyes, two elongate spots at base of head, subquadrate spots to connexivum above beneath, annulations to femora and intermediate and posterior tibiæ, spots to anterior tibiæ, apices of coxe, and the trochanters luteous; antennæ with the

first joint fuscous, remaining joints ochraceous, first joint with a central luteous annulation, apex of second joint fuscous; scutellum with two strong discal as well as long apical spines; anterior pronotal spines long, erect; lateral pronotal spines slightly recurved.

Length 12 to 17 millim. Hab. Ceylon (Green & Lewis).

1058 Petalochirus malayus, Stâl, Ofo. Vet-Al. Forh 1859, p 191;
Reut Rev d'Ent. vi, p 162 (1887), Dist A.M. N.H. (7)
2, p 180 (1902)
Petalochirus vicinus, Sign Ann Soc. Ent. Fi. 1862, p 126
Petalochirus singularis, Walk Cut. Het. vii, p 10 (1873).

Ferruginous, palely sericeous; spots to connexivum above and beneath, a narrow basal and very broad medial annulations to posterior tabiæ, and very numerous macular markings to hemelytra luteous; pronotum with apical lateral spines fuscous, their apices ochraceous, posterior lateral spines long, erect, fuscous, their apices slightly directed forward; scutellium with a long erect spine, lateral abdominal spines about as long as scutellar spine; vol. II.

anterior tibiæ strongly dilated; first joint of antennæ about as long as anterior femora

Length 14 to 15 millim

Hab. Burma, Palon (Fea).—Malay Pennsula

The species identified by Walker as P malayus (loc cit. p. 9) is P brachialis, Stäl Mr Kirby was thus misled into including the first-named species in his Ceylonese enumeration (J. Lain Soc., Zool xxiv, p. 117, 1891)

1059. Petalochirus burmanus, Dist Ann Soc Ent Belg 1903, p 55

Pale fusions or brownish-ochraceous, hemelytra distinctly mottled with luteous and with a small discal fusious spot, sometimes obsolete, connexivum luteous, with large black spots, each black spot containing a very small luteous spot, body beneath blackish, pilose; trochantels, legs and lateral marginal spots luteous; subbasal and apical areas to femora, anterior tibise, basal and apical annulations to intermediate and posterior tibise castaneous; antennæ piccous, first joint with a pale central annulation which in some specimens is obsolete, head prominently sulcated from between the eves, pronotum with a distinct central narrow sulcation, anterior lobe moderately excavate, anterior angles spinously suberect ochraceous, posterior angles obliquely erect fusious, connexivum moderately fusiously spinous at the posterior segmental angles, the spines directed backward, anterior tibise broadly dilated outwardly, moderately dilated inwardly, posterior femora with a distinct spine near apex

Length 12½ to 14 milhm. Hab. Burma; Bhamo (Fea)

A species distinguished by the moderately short spines to the pronotal lateral angles and to the abdominal margins

1060. Petalochirus indicus, Reut Rei d'Entom. vi, p 162 (1887)

Fuscous-ferruginous fuscously pilose; head, pronotum and sternum flavous-sericeous, first joint of antennæ, apices of spines to pronotum, and lateral areas of scutellum black, gutta at base of head, apical spine to scutellum (apex excepted), marginal spots to connexisum and marginal spines before apices, numerous mottlings to hemelytia, trochanters, three annulations to femora and two annulations to tibiæ pale ochraceous, anterior tibiæ internally moderately dilated, externally from middle to base strongly dilated, anterior lobe of pronotum mutilated in typical specimen described; apical pronotal angles longly, erectly spinous

Length, d, 133 millim Hab. Pondicherry (Vienna Mus) I have not seen this species TOULDIO 470

Subfamily VII ACANTHASPIDINÆ

Acanthaspidina, Stal, En Hem iv, p 4 (1874)

This large subfamily of the Reduviidæ differs principally from the Salyavatine in having the anterior tarsi three-jointed; the other characters are practically those detailed in the diagnosis of that subfamily. From the following subfamily (Piratinæ), the Acanthaspidinæ may be distinguished by the position of the transverse impression on the pronotum, which is situated, as an almost general rule, in or before the middle. I have in the synopsis of genera followed my previous practice in this work, of segregating them into divisions, which it is hoped will facilitate their recognition

Division PSOPHARIA

This division, at present represented by only two genera in British India, is a very distinct one The head is long, the postocular area much longer than the anteocular, the rostrum has the first joint as long as the two apical joints together; the antennæ are somewhat remote from the eyes, and inserted near apex of head

Synopsis of Genera.

A Anterior trochanters unarmed, corium laterally sinuate near base Psophis, p 243 B. Anterior trochanters longly spined, lateral margins of corium straight

EUVONYMUS, p 244

Genus PSOPHIS.

Psophis, Stal, Ann Soc Ent Fr 1863, p 53

Type, P erythræa, Stål

Distribution Oriental Region

Head long, postocular much longer than anteocular portion, gradually narrowed and constructed from behind eyes; rostrum slender, first joint as long as the two apical joints together; antennæ with the first joint short, about one-half shorter than the head; pronotum medually constricted, legs slender, tibis without a spongy furrow; posterior tarsi with all the joints elongated.

1061. Psophis erythræa, Stål, Ann Soc Ent. Fr 1863, p 53

Subsericeous; palely sanguineous; claval and subclaval areas (excluding base) fused into the whole membranal area, black tibiæ (excluding bases) and first and second joints of antennæ (remaining joints mutilated in type) fuscous, base of first joint sanguineous, first antennal joint about as long as anteocular TOL II

portion of head, apex of scutellum forming a recurved obtuse spinous tubercle, membrane passing the abdominal apex.

Length 9 millim

Hab. North India (Brit. Mus)

1062 Psophis consanguinea, Dist Ann Soc Ent Belg. 1903, p 58.

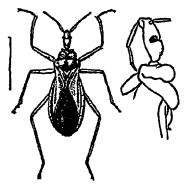


Fig 168 -Psophis consanguinea

Sanguineous; antennæ fuscous, the basal joint sanguineous; membrane pale fuscous. Anteocular portion of head with a faint central longitudinal ridge, anterior pronotal lobe distinctly excavated, disks of anterior and posterior lobes suicately impressed, corium somewhat opaque and faintly pilose; legs moderately pilose; tarsi ochraceous.

Length 12 millim

Hab. Burma; Karennee (Fea).

Genus EUVONYMUS, nov.

Type, E. spiniceps, Dist. Distribution. Ceylon.

Head long, moderately slender, about as long as pronotum, transversely constructed behind eyes, postocular slightly longer than anteocular area, the first constructed at base; rostrum slender, first joint almost as long as remaining two together, second a little

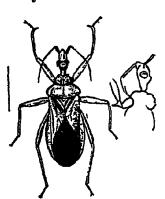


Fig 169 -Euronymus spiniceps.

furrow, posterior tarsı a lı abdomen dılated on each side.

incrassated, antennæ with the first joint short, moderately incressated, shorter than anteocular portion of head, second joint longer than first, shorter than third, pronotum medially constricted, anterior lobe sculptured, much parrower than posterior lobe; scutellum subtriangular, moderately elevated, its apex shortly, robustly, laterally produced; tuberculously anterior coxe long, furrowed, anterior trochanters armed with a long spine, anterior femora somewhat thickly incressated, anterior tibiæ a little curved and spinously produced at apex, not provided with a spongy little elongated; lateral margins of

1063 Euvonymus spiniceps, sp n.

Sanguineous, somewhat opaque, eyes and membrane black; antennæ fuscous, first joint sanguineous; pronotum with the anterior lobe strongly sculptured, posterior lobe, scutellum, and corium smooth; posterior pronotal angles subprominent and subnodulose; scutellum foveate at base, its apex slightly tuberculously recurved, lateral margins of the corium straight; membrane just passing the abdominal apex.

Length 101 millim.

Hab. Ceylon; Pundaluoya (Brit. Mus.).

Division EPIRODERARIA.

Head beneath on each side, prosternum on each side, and coxe more or less spinulose or tuberculose; femora more or less spinose.

Synopsis of Genera.

A. Head with the postocular area long, cylindrical, longer than anteocular portion; eyes and anteocular portion of head strongly spined

B. Head with the postocular area tumid, shorter than anteocular portion which is not spinous, first joint of antenne not passing apex of head

C Head with the anteocular and postocular areas about equal in length, first joint of antenne passing apex of head CENTROCNEMIS, p 245.

Epirodera, p 247.

Marbodus, p 248

Genus CENTROCNEMIS.

Centroenemis, Sign Ann Soc Ent Fr. 1852, p 545, Stål, Hem. Afr 111, p 121 (1865), 1d En Hem iv, p 66 (1874)

Type, C. deyrollei, Sign, a Malayan species

Distribution Oriental Region.

Body ovate, depressed, lateral margins of the abdomen dilated, generally longly spined, but sometimes only obscurely tuberculate; head long, postocular much longer than anteocular portion, which is armed with six spines—one near base of each antenna, one in front of each eye, and one at the upper surface of each eye; rostrum with the first joint almost as long as the two apical joints together; antennæ with the first joint about as long as anteocular portion of head; pronotum with the lateral angles strongly and broadly produced, their apices more or less spinous anterior lobe with two prominent discal spines; scutellium with the apex somewhat tuberculously produced.

A. Abdominal margins obtusely spined, anterior pronotal lobe with two short tuberculous spines

1064. Centrocnemis dearmata, sp n

Dull brownish-ochraceous, mottled with fuscous; spots to connexivum above and beneath, apex of scutellum, apex of first joint

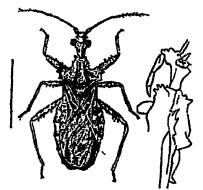


Fig. 170 - Centrocnemis dearmata

to rostrum, apices and obscure medial annulations to femora, biannulations to anterior and intermediate tibiæ, and basal annulations to posterior tibiæ pale ochraceous; disk of sternum and some discal spots to membrane fuscous, first joint of antennæ a little thickened and granulate and about as long as anteocular portion of head, head, pronotum, and scutellum coarsely granulate; spines in front of eyes long, erect; posterior pronotal angles broad, sinuate, with three short broad

dentations; lateral abdominal margins obtusely spined at segmental angles.

Length 18 to 15 millim.

Hab. Ceylon; Colombo (Lewis), Maskeliya (Green).

B. Abdominal margins longly spined, anterior pronotal lobe with two long discal spines.

1065. Centrocnemis ståll, Reut Act Soc Sc Fenn xii, pr 333 (1881)

Dull ochraceous, a transverse spot between eyes, a lateral line on each side behind eyes, a transverse discal fascia to pronotum (not reaching lateral angles), anterior area of pronotum, and corium (excluding veins and base) fuscous; membrane pale ochraceous, mottled with brown and fuscous; body beneath much suffused with fuscous; rostrum with base of first joint, a lateral vitta on each side of second joint, and the third joint fuscous; anterior and intermediate tibiæ pale ochraceous, biannulated with fuscous; anterior lobe of pronotum with two long obliquely erect spines on disk, the lateral angles to posterior lobe with four long spines and some smaller spines on posterior margin, connexivum mottled with brown, each segment with six spines of varying length.

Length 22½ milim Hab. Assam, Khási Hills (Chennell) Sikhim (Coll Dist), Darjeeling (Stockholm Mus)

Genus EPIRODERA.

Epirodera, Westw Trans Ent Soc. 1v, p 247 (1847), Stål, Hem. Afr. 111, pp 120 & 143 (1865), 1d En Hem 1v, p 66 (1874) Physoderes, Westw. Journ Proc Ent. Soc p. cxv (1844)

Type, E. notata, Westw., a Malayan species Distribution. Oriental Region and Madagascar.

Body ovately-oblong; head before eyes longly produced, the anteocular considerably longer than the postocular portion, behind eyes convexly tumid; antennæ short, inserted remote from eyes, first joint not passing apex of head, rostrum with the second joint much the longest; pronotum constricted, the basal angles posteriorly lobately produced; scutellum with the apex considerably laterally produced; hemelytra with the membrane much larger than the corraceous portion; anterior femora moderately incrassated, spinose beneath, anterior tibiæ without a spongy furrow.

1066. Epirodera impexa, Dist. Ann Soc Ent. Belg 1903, p 56 Physoderus fuscus, Bredd SB Ges Naturf Beil 1903, p 126

Head, pronotum, scutellum, basal angle of corrum, body beneath, and legs dark obscure chocolate-brown; corrum, membrane, and

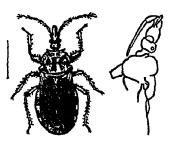


Fig 171 -Epirodera impexa

connexivum piceous; transverse spots to connexivum, basal and subapical annulations to femora and tibiæ, and apex of scutellium ochraceous; apical joint of antennæ (excluding base) Iuteous. Antennæ rather longly pilose; pronotum transversely constricted and trifoveate, prominently ridged at base, and with two central, discal, curved carinæ, lateral margins of anterior lobe serrate; apex of scutellium elongately lobate and

sulcate, anterior femora robust, prominently spined beneath, intermediate and posterior femora moderately thickened and spined beneath

Length 9, breadth between pronotal angles 3 millim

Hab Burma; Karennee (Fea). Tenasserim, Meekalan (Fea)—

Tonkin.

Herr Breddin, in the description of the above species, based on a female specimen from Tonkin, expresses his doubt that it is anything but *E. impexa* I share his view, and have adopted his suggestion.

Genus MARBODUS, nov

Type, M. exemplificatus, Dist Distribution. Ceylon.

Head broad, transverse, robust, spined on each side and beneath, transversely impressed between eyes, and with a very distinct narrow basal collar, antenne with the first joint only about as long as anteocular area of head, but passing its apex; rostrum with the first joint irregularly increasate, shorter than second, pronotum transversely constricted about middle, very broadly centrally, foveately, longitudinally sulcate, the anterior lobe strongly sculptured; anterior angles dentately prominent, posterior angles subprominent, lateral margins finely serrate; scutellum broad, subtriangular, apex moderately produced; abdomen considerably wider than the hemelytra, membrane not passing abdominal apex; anterior and intermediate tibic shorter than the femora, which are increasated, strongly spined beneath, and finely serrate above; anterior and intermediate tibic with an apical spongy furrow.

1067. Marbodus exemplificatus, sp n.

Pale ochraceous; posterior area of pronotum, scutellum, membrane, and spots to connexivum black; head, excluding base and

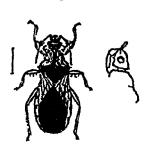


Fig 172 — Marbodus exemplificalus

apex, fuscous; antennæ fuscous, basal joint ochraceous, clavus and apex of rostrum piceous, head above rugulose, spinously rugose behind; pronotum with a very broad, foveate, central longitudinal sulcation containing a centrally-impressed punctate line, anterior lobe strongly sculptured, posterior lobe finely granulate; scutellum transversely rugulose, its lateral margins carmate, its apex a little elongated, connexivum broad, smooth; legs

granulate, spines on under surfaces of anterior and intermediate femora very strong.

Length 6½ millim. Hab. Ceylon; Pundaluoya (Green)

Division REDUVIARIA.

Eyes and occli large or very prominent; eyes extending transversely quite across the lateral areas of the head; pronotum broadly longitudinally impressed or sulcate.

Synopsis of Genera.

Genus ALLÆOCRANUM.

Mecrocleptes, Still, Öfv Vet-Al. Foil 1866, p. 240; id En. Hem. 1v, p 66 (1874); Reut Act Soc Sc. Fenn xii, p 332 (1881), nom. presocc.

Subg Alleocranum, Reut Act Soc Sc. Fenn xu, p 332 (1881), Leth. & Sev Cat. Gén. Hém. 111, p 96 (1896).

Type, A. biannulipes, Montr. & Sign.

Distribution Neotropical and Oriental Regions, the South Sea and Mascarene Islands.

Body oblong; head ovate, broad, anteocular and postocular portions of nearly equal length, anteocular portion tumid and very distinctly sulcate, base distinctly narrowed; eyes extending transversely across the lateral areas of the head; first and second joints of rostrum equal in length; first joint of antennæ a little longer than anteocular portion of head; pronotum unarmed, medially constricted and longitudinally sulcate, scutellum with the apex moderately laterally produced; anterior femora moderately incrassated, anterior tibiæ with a small spongy furrow.

1068. Al mocranum biannulipes, Montr. & Sign. (Opsicotus) Ann. Soc Ent. Fr. 1861, p. 69, Champ Biol. Centr. Amer., Rhynch. 11, p 197, tab xii, fig 6 (1899), Dist. A M N H (7) x, p 181 (1902)

Reduvius langer, Butl. A. M. N H. (4) xvii, p. 411 (1876).

Head, pronotum and scutellum pale castaneous; corium ochra-



Fig. 173 — Allæocranum biannulipes

ceous, with a pale discal longitudinal streak, and a fuscous subclaval and subapical spot to corium; membrane black; legs ochraceous, femora annulated with castaneous; body beneath ochraceous, disk of sternum castaneous, connexivum faintly spotted with castaneous; pilose; legs, antennæ, and lateral margins of body longly pilose.

Length 6 to 7 millim.

Hab. Ceylon (Lewis); Peradeniya (Green). Burma; Palon, Bhamo, Schwegoo-Myo (Fea) Tenasserim; Kawkareet, Thagata (F.—Also recorded from the Malay Archipelago,

South Sea Islands, Bourbon, Central America, and the Antilles.

1069. Allæocranum quadrisignatum, Reut. (Meclocleptes) Act. Soc Sc Fenn x11, p 333 (1881)

Obscure piceous, fuscously hirsute, antennæ, pronotum at posterior angles, apex, carina, and recurved spines to scutellum, apices of femora, tibiæ, tarsi, and disk of abdomen beneath testaceous; hemelytra obscure sericeous-fuscous, base and small triangular apical spot to colium ochraceous

Length 8 millim.

Hab. Darjeeling (Stockholm Mus).

I have not seen this species.

Genus REDUVIUS.

Reduvius, Lamarch, Syst p. 294 (1801), Latr. Hist. Nat in, p. 249 (1802), Burm Handb ii, p. 234 (1835), Spin Ess Hem p. 120 (1840), Amy & Serv Hém p. 387 (1843); Reut Act. Soc. Se Fenn xix, no. 15, p 3 (1802)

. Opsicostus, Kluy, Symb Phys' 11, fol e (1830), Stal, En Hem 1v. р 66 (1874)

Holotrichius, part., Herr.-Schuff Wanz. Ins vii, p 38 (1848). Opinus, part, Stal, Ofv Vet-Al Ford 1855, p 40. Varus, part, Stal, Hem Afi 111, p 141 (1865) Oplistopus, Jaloiel Troudy Ent. Ross viii, p. 79 (1875)

Type, R. personatus, Linn

Distribution Palearctic, Ethiopian, Oriental, and Australasian

Regions.

Body moderately elongate; head oblong, anteocular portion of head longer than postocular portion; eyes large, completely extending across the lateral areas of the head, rostrum with the second joint much longer than the first; pronotum transversely constructed before the middle, the anterior lobe with a strong central sulcation or fissure, which is more broadly extended to disk of posterior lobe; anterior much shorter than the posterior lobe, which has its posterior margin moderately convex; scutellum with its apex spinose or acute; legs moderately long and slender, anterior femora unarmed; anterior tibiæ provided with a spongy furrow of variable dimensions.

A. First joint of antennæ shorter than head

1070 Reduvius pallipes, Klug (Opsicotus), Symb Phys ii, fol e, pl xix, f. 3 (1830), Stål (Opsicotus), En Hem. iv, p 78 (1874), Reut Act Soc Sc Fenn xix, no 15, p 22 (1892) Reduvius thoracicus, Stål, Ofv Vet-Al. Forh 1855, p 188 Reduvius testaceus, Fieb Eur Hem p 156 (1861)

Head, pronotum, prosternum, lateral areas of meso- and metasterna, apical area of abdomen beneath, membrane, and rostrum dark fuscous-brown or piceous, cornum, a lateral and apical spot to membrane, connexivum, body beneath, and legs stramineous, clavus (excluding apex), a central transverse fascia, connected with base of membrane, dark fuscous-brown, first joint of antennæ about as long as anteocular area of head, second nearly three times in female and nearly four times in male longer than first, posterior lobe of pronotūm anteriorly strongly strigose, anterior lobe strongly centrally sulcate; legs and antennæ pilose

Length 14 to 18 millim.

Hab Baluchistan; Quetta (Brit Mus)—A well-known Palæarctic species, distributed from Greece and Cyprus eastwards through Persia and Turkestan

1071 Reduvius cincticrus, Reut Rev d'Entom vi, p. 159 (1887), id Act Soc Sc Fenn xiv, no 15, p 34 (1892)



Fig 174 -Reduvius cinctierus

Head, pronotum, scutellum, and body beneath castaneous, the abdomen a little paler; anterior margin and lateral angles of pronotum, corium, spots to connexivum above and beneath, and legs luteous; a median macular fascia before apical angle of corium and a subapical annulation to femora castaneous antennæ with the first and second joints pilose, remainder mutilated in type, first joint about as long as anteoculai portion of head, pronotum centrally strongly sulcated; membrane fuscous.

Length 10 millim
Hab. Sylhet (Vienna Mus).

My thanks are due to Dr. Handlirsch, of the Vienna Museum, for allowing me to see the types of this and the following species

1072 Reduvius transnominalis, nom nov Reduvius debilis, Reut Rev d'Entom vi, p 100 (1887), id Act Soc Sc Fenn xix, no 15, p. 35 (1892), nom præocc

Brownish-ochraceous, shining; hemelytra dull ochraceous, opaque; head and posterior lobe of pronotum moderately castaneous; somewhat strongly pilose, especially the legs and antennæ, antennæ with the flist joint about as long as the anteocular portion of head; pronotum centrally sulcate, the auterior lobe a little globose, lateral angles subprominent and very slightly recurved, membrane not reaching the abdominal apex.

Length 8 millim.

Hab "N. India" (Fienna Mus)

1073. Reduvius knyvetti, sp n

Head, anterior lobe of pronotum, scutellum, anterior areas of prosternum, the meso- and metasterna, and abdomen beneath

piceous, posterior lobe of pronotum, hemelytra, acetabula, coxe, and legs luteous, a large central spot and a small subobsolete spot on each lateral area of posterior pronotal lobe, clavus (excluding base and a contiguous subclavate spot on corium), an elongate pyriform spot on posterior lateral margins of corium, veins and some suffusions to membrane, basal two-thirds of femora, and a broad subbasal annulation to tibiæ fuscous-brown, lateral margins and a central fascia to abdomen beneath luteous, the connexivum with segmental piceous spots; antennæ fuscous, first joint about as long as from insertion to base of head; pronotum with the anterior lobe strongly sculptured, shorter and much narrower than posterior lobe, which is broadly transversely foveately impressed on disk, rostrum with the first joint much shorter than second

Length $14\frac{1}{2}$ millim. Hab. Sikhim (Knyvett).

1074. Reduvius esau, sp. n

Ochraceous, longly pilose, the legs very longly pilose on each side; hemelytra fuscous, the base and lateral margins ochraceous, apical area of abdomen beneath more or less infuscated, antennæ fuscous, pilose, base and apex of first joint ochraceous, first joint about as long as anteocular portion of head, second joint nearly three times longer than first; rostrum with the first joint a little shorter than second; pronotum with the anterior lobe shorter than the posterior and somewhat strongly sculptured, posterior lobe anteriorly finely transversely strigate, disks of both lobes sulcate

Length 12 millim.

Hab. Ootacamand (Atkinson, Brit Mus).

B. First joint of antennee as long as head.

1075. Reduvius boyesi, sp n.

Very pale luteous; head, a W-shaped fascia at base of posterior pronotal lobe, scutellum, larger part of clavus, and obsolete indications of a transverse fascia to corium at base of membrane, piceous or fuscous; membrane fuscous, lateral marginal spots and apex creamy-white, femora with faint indications of a subapical fuscous annulation, apex of head luteous, rostrum fuscous, antennæ longly pilose, first joint about as long as head and scarcely shorter than second joint, first and second joints of rostrum subequal in length; ocelli very large; pronotum much attenuated anteriorly, the anterior lobe somewhat longitudinally striate, about as long as the posterior lobe, membrane passing the abdominal apex.

Length 11½ millim. Hab. Kumaun, Almoi h (Boyes, Brit Mus.).

C. First joint of antennæ as long as pronotum.

1076. Reduvius angiportus, sp n.

Head, rostrum, body beneath, coxæ, trochanters and femora fuscous, anterior lobe of pronotum and scutellum dark castaneous, posterior pronotal lobe brownish-ochraceous, corium, tibiæ, and spots to connexivum above and beneath pale ochraceous; membrane pale brownish, bases and apices of tibiæ, and apices of tarsi, dark castaneous; antennæ brownish-ochraceous, pilose, apices of first and second joints and the whole of remaining joints fuscous, first joint about as long as pronotum, and as long as third joint, a little shorter than second, pronotum granulate, shortly pilose, anterior disk centrally broadly sulcate, posterior lateral angles shortly tuberculously produced; scutellum granulate, apical spine a little recurved; membrane considerably passing abdominal apex, anterior femora only very slightly thickened; veins to corium very prominent; body opaque above, moderately shining beneath

Length 13 millim

Hab Bor Ghát (Dixon)

Mr. Dixon captured a single male specimen of this well-marked species

Genus GERBELIUS.

Gerbehus, Dist Ann Soc Ent Belg 1903, p 59

Type, G. typicus, Dist.

Distribution Oriental Region.

Head robust, moderately broad, anteocular shorter than the postocular area, which is moderately globose, eyes large, extending transversely across the lateral areas of the head; antennæ with the first and second joints shortest, first joint about reaching apex of head, second a little more than twice as long as first; rostrum with the first joint shorter than head, about as long as remaining joints together; pronotum with the anterior and

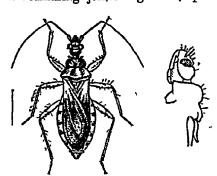


Fig 175 — Gerbelius typicus

posterior lobes about equally long, the anterior globose, irregularly excavate, with the anterior angles prominent, both lobes centrally transversely foveately impressed, posterior margin deflected; scutellum centrally sulcate, apex spinously produced and slightly ascending; abdomen broad, ovate, connexivum strongly exposed; femora minutely spined beneath

1077. Gerbelius typicus, Dist Ann Soc. Ent Belg 1903, p 59
Head, pronotum, scutellum, membrane, and body beneath

brownish-piceous, first and second joints of antennæ, apex of scutellium, corium, connexivum, rostrum, and legs luteous, apical third of corium, spots to connexivum above and beneath, brownish-piceous; femora with a funt, obsolete, fuscous subapical annulation.

Length $8\frac{1}{2}$ to 9 millim Hab. Burma, Palon, Bhamo, Schwegoo-Myo (Fea).

1078. Gerbelius ornatus, Dist Ann Soc. Ent. Belg. 1903, p 59

Brownish-piceous, femora pale brownish, their bases, the tibies, tarsi, antennie, rostrum, a large spot occupying the claval apices and adjacent area of corium, apical angle of corium, a small adjacent spot on membrane, and the apex of scutellum pale ochraceous; femora finely but distinctly spined beneath, connexivum with pale narrow transverse incisural spots.

Var Apical angle of corium concolorous, piceous; connexivum

brownish-ochraceous.

Length 8½ to 10 millim

Hab. Bor Ghát (Dixon) Ceylon (Green).

Division ACANTHASPISARIA.

This division differs from the *Reduviaria* in having the eyes and ocelli small or mediocre; eyes sometimes large, but then never extending transversely across the lateral areas of the head, the pronotum is not broadly longitudinally compressed or sulcate

Synopsis of Genera.

A Pronotum and sternum lævigate or rugulose, not granulate

a. Eyes of ordinary size, not unduly prominent.

a Posterior tars: with the second joint not longer than the third

b Posterior tarsi with the second joint longer than the third

a' Prosternum normal, not tuberculously or spinously produced on each side of central sulcation

b' Prosternum on each side of central sulcation tuberculously or spinously produced

b Eyes very large and prominent
B Pronotum and sternum distinctly granulate

Acanthaspis, p 257.

PASIRA, p 254

Pasiropsis, p 255 Inara, p. 278 Edocla, p 274

Genus PASIRA.

Pasira, Stål, Öfo Vet-Al. Forh 1859, p 190, id Hem. Afr in, p. 122 (1865); id En Hem iv, p. 65 (1874) Aphleps, Fieb Veih z-b Ges Wien, 1870, p 248. Mastacocerus, Reut Act Soc Sc Fenn vii, p 323 (1881) Ceromastix, Bergi Rev d'Ent xui, p 163 (1894)

Type, P. basiptera, Stål, a Palæarctic species

Distribution Palmarctic, Ethiopian, and Oriental Regions.

Head behind eyes somewhat prominent, narrowed at base, before eyes conically produced, antennæ with the first joint not reaching apex of head, second joint about twice as long as first. rostium with the first joint shorter than the second, pronotum unaimed, medially constricted, posterior angles not produced, scutellum with the apex spinously laterally produced, anterior femora moderately incrassated, legs unarmed, anterior tibiæ provided with a spongy furrow, posterior tarsi with the first joint short, second and third joints subequal.

1079 Pasira perpusilla, Walk (Reduvius) Cat Het vii, p 196 (1873), Dist A M N H (7) x, p 295 (1902)

Mastacocerus humeralis, Reut Act Soc Sc Fenn vii, p 324 (1881)

Piceous-blown, apical area of clavus and spots to connexivum

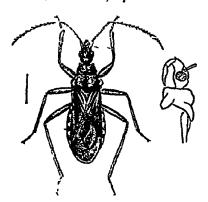


Fig 176 -Pasira perpusilla

above and beneath luteous; first joint of antennæ moderately incrassated and not leaching apex of head; anterior angles of pronotum a little prominent, anterior lobe slightly sculptured, scutellum foveate on disk, membrane passing abdominal apex; connexivum prominent; anterior femora robust, apically narrowed; body and legs sparingly and finely tomentose.

Var Base of corium luteous. Length 6 to 6½ millim

Hab. North Bengal (Campbell,

Brit. Mus). Burma; Rangoon, Palon, Mandalay (Fea)
I am under obligation to Dr Meinert, of the Copenhagen
Museum, for enabling me to examine Reuter's type

Genus PASIROPSIS

Pasitopsis Reut Act Suc Sc Fenn. vii, p 329 (1881)

Type, P. bipustulata, Reut, from Borneo

Distribution Oriental Region.

Head broad, posteriorly parrows

Head broad, posteriorly narrowed, before eyes obliquely deflected, rostrum with the first and second joints subequal in length, intenue with the first joint a little incrassated, about as long as from insertion to base of head, much shorter than second joint; pronotum with the anterior lobe narrow, convex, moderately

sculptured, posterior lobe with the lateral angles moderately produced and acuminate, its disk centrally sulcate, scutellum produced in an oblique semi-erect spine; prosternum on each side of central sulcation tuberculously or spinously produced; metasternum and abdomen beneath centrally obtusely carinate, anterior tibin with an apical spongy furrow.

1080. Pasiropsis notata, Dist Ann Soc Ent Belg 1903, p 56

Piceous, opaque; conum and membrane bronzy; a large

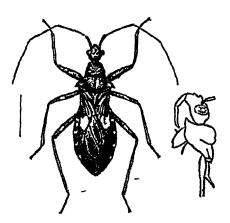


Fig 177 —Pastropsis notata

Length 9½ millim
Hab Burina; Karennee (Fea).

ochraceous spot near inner of corium, almost reaching the lateral margin. incisural spots to connexivum both above and beneath. and a subapical annulation to intermediate and posterior femora, ochraceous; tibiæ piceous - brown Posterior angles of pronotum obtusely directed backward; apex of scutellum obliquely spinously ascending; posterior lobe of pronotum with a distinct narrow central sulcation; anterior prosternal process well developed

1081 Pasiropsis maculata, Dist Ann Soc Ent Belg 1903, p 56

Piceous, opaque, corium and membrane bronzy brown, aper of clavus pale brownish, spots to connexivim at segmental incisures above and beneath ochraceous, legs and rostrum piceousbrown. Posterior angles of pronotum subacute and slightly directed backward, apex of scutellum spinously obliquely ascending, anterior prosternal process well developed, the spinous tubercles prominent.

Length 8 millim

Hab Burma, Karennee, Palon; Tenasserun, Meetan (Fea)

1082 Pasiropsis marginata, Dist Ann Soc Ent Belg 1903, p 57.

Piceous, moderately shining, corium, membrane, and legs piceous-blown, connexivum and abdomen beneath ochraceous, posterior angles of the pronotum obtusely directed backward, posterior pronotal lobe centrally profoundly sulcate, apex of

scutellum strongly spinously produced, but very slightly ascending, anterior prosternal process well developed

Length 7 millim.

Hab. Burma; Karennee (Fca)

1083 Pasiropsis nigerrima, Bergr Bull Soc Ent Fi 1896, p 9

Piceous-black, shining, hemelytra opaque, apices of rostrum and tibiæ and the tarsi brownish-ochraceous; anterior pronotal lobe moderately sculptured, posterior pronotal angles short, obtuse, central sulcation to posterior lobe distinct; connexivum finely granulate and brownish-piceous; legs dark castaneous, anterior legs distinctly pilose beneath.

Length 9 millim

Hab. Bombay (Coll Bergroth).

Genus ACANTHASPIS.

Platymeris, part , Burm Handb n, p 233 (1835)
Acanthaspis, Amy & Seiv Hém p 336 (1843) , Stâl, Hem Afi
in, pp 122 & 126 (1865) , id En Hem iv, p 65 (1874)
Tetroxia, Amy & Seiv Hém p 334 (1843)
Mardania, Stâl, Öfv Vet -Al Foih 1859, p 189
Subg Plynus, Stâl, En Hem iv, p 71 (1874)

Type, A flavoraria, Hahn, a Javan species, confused with A sexguitata, Fabr, by Amyot and Serville.

Distribution Oriental and Ethiopian Regions.

Body oblong-ovate; head oval or oblong, ante- and postocular areas generally about equal in length; rostrum with the first and second joints variable in length, usually about equal in length, pronotum constricted before middle, in some few instances behind middle, anterior lobe without spines, posterior lobe sometimes discally spined and usually with the lateral angles prominent either as spines or tubercles; scutellum with the apex longly spinously produced and generally obliquely ascendant, anterior femora moderately incrassated, unarmed; anterior tibic provided with an apical spongy furrow.

- I. First joint of antennæ passing apex of head.
- A Posterior lobe of pronotum with two long discal spines.
- a First and second joints of rostrum equal or subequal in length.
 - a Legs not annulated, almost unicolorous.
- 1084. Acanthaspis quinquespinosa, Fabr 'Reduvius) Spec Ins ii, p 382 (1781), id (Reduvius) Mant n, p 313 (1787), Wolff (Reduvius), Ic Cim 1, p 39, f 39 (1800), Stal, En Hem 1v, p 72 (1874)

Black, the four posterior spines to pronotum—two lateral

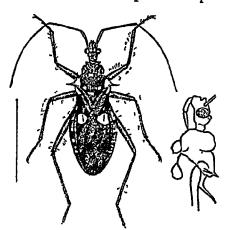


Fig 178 — Acanthaspis quinquespinosa

Length 15½ to 19 millim

Hab Assam, North Khási Hills (Chennell), Margherita (Doherty) Bengal, Ranch (Ivine) (Diaon). Ceylon (Green). Burma; Palon (Fea)

two discal-and then areas, a basal and a transverse discal spot to corrum. and spots to connexivum above and beneath luteous, legs and antennæ castaneous, first and second joints of jostrum subequal in length, basal joint of antennæ about as long as head, anterior lobe of pronotum strongly sculptured. posterior lobe rugose, with a long lateral spine on each side, and with two shorter erect discal spines between them, scutellar spine long, obliquely ascending

Bombay (Letth), Bor Ghát

1085 Acanthaspis xerampilina, Dist Ann Soc Ent Bely 1903,

Dull reddish; eyes, scutellum excluding apex, clayus excluding base, a large subclaval spot to corrum which does not reach base but posteriorly joins basal angle of membrane and is continued along the greater part of apical margin of corium, membrane, and laterabaseas of sternum piceous, pionotum with the lateral angles produced into long acute spines directed backward, and with two long erect spines near the posterior margin, anterior lobe sculptured, anterior angles tuberculously prominent, posterior lobe very finely granulate, scutellar spine long, obliquely erect, membrane passing apex of abdomen, head sulcated between eyes, first and second joints of iostium subequal in length, first joint of antenne about as long as head

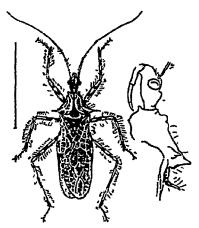
Length 19; breadth between pronotal angles 6; millim Hab Burma (Vigors)

b Legs with dark annulations

1086 Acanthaspis sericata, sp n

Ochraceous, sericeous, head somewhat piceous, antennæ with the first and second joints brownish-ochraceous, remainder fuscous, apex of second and sometimes apical area of first joint fuscous, pronotum with a picrous spot at base the lateral angles longly spinous and two long elect discal spines between them, scutellum

piceous, apex of apical spine luteous; hemelytra much mottled



rig 179 — Acanthaspis sciuata

with fuscous, the venation and transverse vein-like markings to corium luteous; membrane with the basal venation fuscous, the apical luteous; connexivum above and beneath spotted with black; body beneath black, apices of coxe legs pale ochraceous, and annulated with piceous; rostrum with the base of first joint and apex of second piceous; rostrum with the first and second joints subequal in length, first joint of antennæ about as long as head

Length 16 to 20 millim.

Hab. Ceylon; Maskeliya (Green)

b Frist joint of rostrum a little longer than second

1087. Acanthaspis subrufa, Dist A. M N H (7) u, p 354 (1903)

Black, posterior lobe of pronotum, a large spot before apex of corium (extending from lateral to apical margins), connexivum, rostrum, legs, and lateral margins of abdomen reddish-ochraceous, iostrum with the first joint a little longer than the second; anterior pronotal lobe strongly sculptured, posterior lobe with two strong ascendant spines near posterior margin, and the lateral angles strongly spinously produced, the spines directed a little backward; scutellar spine long, laterally produced; antennæ mutilated

Length 17, breadth between pronotal angles 6 millim. Hab Bangalore (Atkinson Coll, But Mus)

B Posterior labe of pronotum with two short but prominent discal tubercles.

a Pronotum unicolorous, unspotted.

1088 Acanthaspis fulvipes, Dall (Platymeris) Tr Ent Soc 1850, p 6, pl 11, f 3, Ställ, Ann Soc Ent Fi 1863, p 49, Dist
A M N H (7) x, p 183 (1902)
Acanthaspis quadrinotata, Wall. Cat Het vii, p 175 (1873)
Acanthaspis quadristillatus, Ställ, MS

Piceous, antennæ, a spot behind each eye on side of ocelli, rostrum, legs, and central disk of abdomen reddish-brown; a basal spot and large transverse spot behind middle of corium, and spots to connexivum above and beneath, ochraceous: apices of femora and

the tibix testaceous first joint of rostrum distinctly longer than the second, first joint of antennæ about as long as head; pronotum with the anterior lobe moderately sculptured and deeply centrally foreste on its posterior margin, posterior lobe obsoletely rugulose, its lateral angles shortly acutely spinous, their apices recurred scutellar spine long, obliquely ascendant

Length 25 to 26 millim

Hab Bhutan (Brit Mus) Sikhim Assam, Sibságar (Ind East Bengal (Coll Dist)

A specimen in the British Museum, examined by Stal, bears his

own label A quadristillatus, Stal

1089 Acanthaspis bistillata, Stal, Ofv Tet-Al. Forh 1858, p 443, Reut Act Soc Sc. Fenn All, p 327 (1881), Dist A M N H (7) x, p 183 (1902) Acanthaspis pictipes, Walk Cat Het vii, p 176 (1873) Var Acanthaspis picina, Stal, Ann Soc Ent Fr 1863, p 49

Black, corrum with a large ochraceous transverse spot behind middle, apices of femora and the tibiæ and tarsi pale sanguineous, connexivum unicolorous, first joint of rostrum distinctly longer than the second, first joint of antennæ a little longer than the pronotum with the anterior lobe moderately sculptured, posterior lobe obsoletely rugulose, posterior lateral angles spinously produced and recuived, posterior disk with two short but prominent tubercles, scutellar spine long, obliquely ascendant.

Length 22 to 23 millim.

Hab Ceylon, Perademya (Green) Andaman Islands (fide

Walker, in his description of his A. pictipes, writes -"Fore uings with a large round luteous spot near the base" He should have written "near apex" Stal's A. prema, the type of which is in the British Museum, is a varietal form in which the legs have the 1ed markings very obscure

1090 Acanthaspis luterpes, Walk Cut Het vn, p. 175 (1873) Acanthaspis discitera, Stal, En Hem iv, p 73 (1874)

Dull purplish-brown, head with a spot on each side of ocelli, antennæ, rostrum, a large transverse spot almost crossing corium at inner angle, spots to connexivum above and beneath, disks of meso- and metasterna, abdomen beneath, coxæ, trochanters, and legs pale ochraceous, head with a distinct longitudinal incision between eyes, first joint of antennæ about as long as head, first joint of rostrum shorter than the second, pronotum with the anterioi lobe moderately sculptured and centrally sulcate, posterior lobe very obsoletely rugulose, lateral angles subjectely prominent, posterioi disk with two small tubercles; scutellar spine obliquely ascending Length 17 to 18 millim

Hab "North Hindostan' (Bit Mus) Bangalore (Coll Dist) In some specimens of this species the discal tubercles to the posterior pronotal lobe are barely discernible

- b. Pronotum with anterior and posterior lobes differently coloured
 - a Scutellar apreal spine long, porrect

1091. Acanthaspis porrecta, sp n

Closely allied to the preceding species (A. luteipes), and principally differing by the structure of the scutellum, which has the apical spine very long and robust, not obliquely ascendant, but laterally porrect; the head, anterior lobe of pronotum, base of scutellum, and hemelytra (excluding spots) are piceous

Length 18 millim

Hab Ceylon, Peradeniya (Green)

b. Soutellar apical spine obliquely ascendant.

1092 Acanthaspis tavoyana, Dist A M N. H (7) x1, p 355 (1903)

Black; head, anterior lobe of pronotum, lateral and posterior margins of pronotum (the last arcuated and inwardly bicurved), lateral margins of corium (widened near base and only extending about two-thirds from base), a small spot on apical margin, connexivum, a spot on each side of head beneath behind eyes, and lateral margins of sternum and abdomen dull red, first joint of rostrum a little longer than the second, anterior pronotal lobe strongly sculptured, posterior lobe finely rugulose, the lateral angles spinously produced and directed a little backward, and with two short tubercles on posterior margin, scutellar spine obliquely ascendant

Length 19; breadth between pronotal angles 6 millim Hab. Pegu; Tavoy (Atkinson Coll, Brit Mus)

1093 Acanthaspis biligata, Walk (Reduvius) Cat Het vii, p 195 (1878), Dist A M N H (7) x, p 184 (1902)

Ochraceous; head, anterior lobe of pronotum, anterior lateral margins, two small discal spots, a larger central basal spot, and hind margin of posterior lobe, scutellum (excluding obliquely ascendant apical spine), clavus (excluding margins), subclaval area, a subbasal spot, two small central spots and apex of corium, basal and apical areas of membrane (excluding veins), spots to connexivum above and beneath, body beneath, rostrum, antennæ, and basal, apical, and central annulations to femora and tibiæ fuscous first joint of rostrum distinctly longer than second, basal joint of antennæ slightly longer than head; pronotum with the anterior lobe very strongly sculptured, posterior lobe finely rugulose, the lateral angles spinously produced and recurved, posterior disk with two short but prominent tubercles

Length 20 millim

Hab. Burma; Karennee (Fea) — Siam (But Mus)

- c Pronotum palely marked or spotted
- a. Legs entirely, or almost, unicolorous.

1094 Acanthaspis flavipes, Stal, Ofv Vet -Al. Fork. 1855, p 187, Reut Act Soc Sc Fenn xii, p 325 (1881)

Acanthaspis quinquespinosa, var flavipes, Stål, En Hem iv, p 72 (1874)

Var Acanthaspis geminata, Reut Act Soc Sc Fenn xii, p 325 (1881)

Piceous or chocolate-brown, antennæ, posterior area and lateral angles of pronotum, basal angles and a large transverse spot beyond middle of collum, spots to connexivum above and beneath, lostium, legs, central ridge to abdomen, and apex of scutellar spine luteous, rostrum with the first and second joints subequal in length, first joint of antennæ about as long as head; pronotum with the anterior lobe strongly sculptured, the posterior lobe lugulose, lateral angles spinously produced and recurved, posterior disk with two distinct and prominent tubercles, scutellar spine obliquely ascendant

Va. The luteous area of the posterior pronotal lobe broken up

into four spots

Length 15½ to 16 millim

Hab Sind (Coll Dist) Himalayas (fide Reuter) Bombay (Coll Dist)

1095. Acanthaspis angularis, Stål, Öfo Vet -Ak Fork 1859, p. 188, Dist A M N H (7) x, p 184 (1902)

Acanthaspis dubius, Walk Cat Het vii, p 177 (1873)

Var Acanthaspis helluo, Kirby (nec Stål), J Linn. Soc, Zool

xxix, p 114 (1891)

Piceous, or piceous-brown, lateral posterior angular areas of pronotum, a large transverse spot beyond middle of corium, spots to connexivum above and beneath, and legs ochraceous or luteous, first and second joints of rostrum subequal in length, first joint of antennæ about as long as head, pronotum with the disk sulcate, anterior lobe strongly sculptured, hind lobe posteriorly finely rugulose, lateral angles spinously produced and recurved, scutellar spine obliquely ascendant and recurved

Var. Cornum with a luteous spot at base

Length 15 to 17½ millim

Hab. Bombay (Leth) Madras (Coll Dist) Ceylon, Peradeniya, Chilaw (Green)

1096. Acanthaspis vincta, Dist Ann Soc Ent Belg 1903, p 57

Piceous-black; basal joint of antennæ, the lateral angular areas and two central basal spots to pronotum, basal angle, and a large spot near inner angle of corium reaching lateral margin and also the basal margin of membrane, upper surface of abdomen and

connexivum, legs and second joint of rostrum reddish-ochraceous; large spots to connexivum and apex of abdomen above piecousblack, basal areas of femora piecous-blown, antennæ (excluding basal joint) pale brownish; pronotum with the lateral angles spinously prominent, the angles slightly directed backward; posterior pronotal lobe faintly centrally sulcate, posterior disk with two short but prominent tubercles, apex of scutellum strongly spinously produced and obliquely erect, head distinctly sulcate between the eyes; first and second joints of rostrum subequal in length

Length 21; breadth between pronotal angles 6½ to 7 millim

Hab. Burma, Bhamo, Teinzo (Fea)

1097. Acanthaspis gulo, Stål, Ann Soc Ent Fi 1863, p 50

Black; head, pronotum, corium, and connexivum above and beneath pale sanguineous; a spot on head at area of ocelli, three fasciate spots anteriorly confluent on posterior lobe of pronotum, posterior pronotal margin, scutellum (excluding apex of apical spine), clavus, a large subclaval spot extending to base of membrane, and apex of corium, membrane, and body beneath black or piceous; rostrum with the first and second joints subequal in length, first joint of antennæ about as long as head, pronotum with the anterior lobe strongly sculptured, posterior lobe rugulose, finely centrally sulcate, lateral angles prominently spinous, their apices recurved, posterior disk with two short but distinct tubercles; scutellar spine obliquely ascendant, black, with its apex reddish

Var Apices of femora and the tibiæ and tarsi pale sanguineous

Length 17 to 20 millim.

Hab. Sylhet (Stockholm Mus.) Tavoy (Coll. Dist) — Malay Peninsula

b Apices of femora and tibiæ palely coloured

1098 Acanthaspis helluo, Stål, Ann Soc Ent Fr 1863, p 50

Black; lateral angles of pronotum and two spots between them, base and a transverse subarcuated spot beyond middle of corium, spots to connexivum above and beneath, apices of femora and tibia and the tarsi pale sanguineous, first and second joints of rostrum subequal in length; first joint of antenna a little longer than head, pronotum with the anterior lobe moderately sculptured, posterior lobe almost smooth, the lateral angles subspinously produced, their apices slightly recurred, posterior disk with two short but distinct tubercles; scutellar spine long and obliquely ascendant

Length 20 to 22 millim

Hab Sylhet (Brit Mus) Assam; Khúsi Hills (Chennell), Nága Hills (Doherty).

1099 Acanthaspis pernobilis, Reut Act Soc Sc. Fenn xii, p 325 (1881)

Black, sparsely fuscously pilose, opaque, four small spots on posterior lobe of pronotum one at each lateral angle and two medial at basal tubercles, an arcuate transverse fascia on the corium, arcuated anteriorly, concave between lateral margins and exterior angle, interior basal area, membrane, apical segmental fasciae to connexisum and apices of femora red or reddishferruginous, apices of tibiae anteriorly broadly and the tarsi ferruginous; first joint of antennae as long as posterior lobe of pronotum; pronotum with the posterior lateral angles shortly dentately produced, posterior disk with two distinct tubercles, apex of scutellar spine ferruginous.

Length 22½ millim

Hab Darjeeling (Stockholm Mus.).

I have not seen this species

e Legs with dark annulations.

1100 Acanthaspis zebraica, sp n

Piceous, first and second joints of antennæ, four spots at base of pronotum (two angular and two central), a basal and a large angulately transverse spot (sinuated anteriorly and posteriorly) to corium, spots to connexivum above and beneath, and legs luteous; a broad submedial annulation to femora and extreme bases of tibus piceous, apex of membrane pale fuliginous, rostrum with the first and second joints subequal in length, first joint piceous, remaining joints castaneous; basal joint of antennæ distinctly longer than head; pronotum with the anterior lobe prominently sculptured, posterior lobe finely and obscurely rugulose, the lateral angles tuberculously subprominent; posterior disk with two short distinct tubercles, scutellar spine obliquely ascendant, its apex castaneous

Length 19 millim

Hab Burma, Palon (Fea).

- C. Posterior lobe of pronotum discally unarmed.
- a. Later al angles of pronotum prominent, spinous, or tubercular.
 - a Pronotum unicolorous, unspotted

a'. Legs un colorous.

1101 Acanthaspis rugulosa, Sill, Ann Soc Ent Fr. 1863, p 49, id En Hem. iv, p 73 (1874)

Piceous, a large spot almost crossing corium at inner augle pale ochraceous, first and second joints of rostrum almost subequal in length; first joint of antennæ considerably shorter than head, pronotum with the anterior lobe strongly sculptured, the

posterior lobe rugose, lateral angles dentately prominent, posterior disk unarmed; connexivum somewhat strongly recurved; scutellar spine obliquely ascendant.

Length 18 to 20 millim.

Hab Bengal (Bit. Mus) Bombay (Leith).

Stal, in his 'Enumeratio Hemipterorum,' arranges this species among those which have the disk of the posterior lobe of pronotum tuberculate. Of the tuberculation in this species, he writes, "minutissimo, granuliformi, ægie distinguendo,." They are practically absent and too obsolete for any classificatory purpose

1102 Acanthaspis siva, sp n

Black or dark piecous, conum with a basal angular and a subapical irregularly rounded creamy-white spot; membrane with the apex creamy-white, enclosing a fulginous spot, connexivum above and beneath spotted with pale ochraceous; antennæ with the basal joint black, strongly pilose, remaining joints brownish-ochraceous, first joint about as long as head; rostrum with the first joint slightly longer than second pronotum with the anterior lobe moderately sculptured, posterior lobe rugulose, distinctly centrally sulcate, lateral angles dentately produced and recurved, disk unarmed; scutellar spine obliquely ascendant, legs strongly pilose.

Length 18 milhn.

Hab North Central Provinces (Coll Dist.)

b'. Femora and trbia differently coloused.

1103. Acanthaspis megaspila, Walk. Cat Het vn, p 176 (1873).

Black; cornum (excluding base and apical angles) and a subclaval streak luteous; rostrum, coxæ, trochanters and femora pale castaneous, tibiæ and tarsi ochraceous; head with two small ochraceous spots behind eyes; antennæ pilose, with the first joint castaneous, second brownish-ochraceous, remainder fuscous, first joint a little shorter than head; rostrum with the first snd second joints subequal in length, pronotum with the anterior lobe strongly sculptured, the posterior lobe rugose, its lateral angles shortly dentately produced, posterior disk unarmed; scutellar spine obliquely ascendant; margins, abdomen beneath, and legs longly pilose

Length 19 to 20 millim.

Hab. "Hindostan" (Whitehill, But Mus) Bor Ghat (Duxon)
The puncture made by this Reduviid causes acute pain with
burning sensation, the symptoms of the case very much resembling
those produced by the bite of the venomous reptile Trimeresurus
anamallensis The smarting sensation, if immediately attended
to, subsides in one or two hours; but the whole hand becomes
painfully swollen if the punctures occur on a finger, the wound
taking about ten days to heal. (R. M Dixon)

c'. Femora black, their apries and the tibre pale

1104. Acanthaspis apicata, Dist. A. M. N. H. (7) Ni, p. 354 (1903) Tetroxia (Acanthaspis) nigricollis, Biedd SB Ges Naturf Bol./ 1903, p. 118

Piceous, a spot at base and a much larger spot near apex of corium, large spots to connexivum (above and beneath), tibiæ, tarsi, and apices of femora luteous, apex of membrane broadly greyish, with a small apical fuscous spot, first joint of rostrum a little longer than the second; anterior lobe of pronotum sculptured, posterior lobe finely granulate, with a narrow central longitudinal impression, lateral angles moderately prominent, their apices a little recurved, posterior disk unarmed, scutellar spine long, very slightly ascendant, legs longly pilose; antennæ mutilated in specimen described

Length 17; breadth between pronotal angles 5 millim.

Hab Kashmu (Hugel); Ootacamand (Athinson Coll., Brit. Mus)
Sangli (Bredd)

d'. Legs pale, femora darkly annulated.

1105 Acanthaspis binghami, Dist A M N H (7) xi, p 354 (1903)

Black; a spot behind eyes, a spot at base of corum and a much larger one before apex (the last a little excavate anteriorly and posteriorly), spots to connexivum above and beneath, and the legs luteous, a broad annulation to femora before apex and extreme bases of tibus black, first joint of rostrum a little longer than the second, antenne and legs priose, first joint about as long as head, anterior lobe of pronotum sculptured, posterior lobe granulate, with a distinct central longitudinal impression, lateral angles subprominent, posterior disk unarmed, scutchar spine long slightly ascendant

Length 18, breadth botween pronotal angles 5 milhm

Hab Upper Burma, Ruby Mines District (Bingham, But Mus)

b. Pronotum with the lateral angles palely coloured

1106. Acanthaspis succinea, Dist. Ann Soc. Ent Belg. 1903, p 58

Head, pronotum, scutellum and sternum piceous, clavus, a claval marginal fascia to corium, not reaching base membrane and abdomen beneath brownish-piceous, lateral angles to pronotum, corium, large quadrate spots to connexivum above and beneath, and the legs ochraceous, a subbasal spot and apical angle to corium, and a subapical annulation to femora, piceous, antennæ dull ochiaceous, the apical joints brownish, rostram (excluding basal joint) castaneous; posterioi lobe of pronotum rugulose, centrally sulcate, lateral angles obtusely subprominent, head sulcate between the eyes, apex of scutellum moderately, spinously, obliquely erect

Length 18, breadth between pronotal angles 51 millim

Hab Burma, Minhla (Fea)

c. Pronotum with the anterior and posterior lobes differently coloured

1107. Acanthaspis divisicollis, Walk (Reduvius) Cut Het vn, p. 197 (1873), Dist A M N H (7) x, p 185 (1902)

Body slender, head, anterior lobe of pronotum, and base of scutellum olivaceous-black; posterior lobe of pronotum, scutellum (excluding base), corium, abdomen above, rostrum, trochanters body beneath, and femora dull purplish-red, tibre and tais a piceous anterior and lateral margins of sternum somewhat olivaceous; membrane with the basal area shining black, narrowly outwardly margined with ochraceous, its apical area fuscous, veins ochraceous at base; rostrum with the first joint a little longer than second, antennæ mutilated in typical specimen, anterior lobe of pronotum strongly sculptured, posterior lobe transversely rugose, lateral angles moderately, tuberculously, obtusely prominent; scutellar spine obliquely erect, body and legs longly pilose; corium sericeous

Length 15½ millim

Hab Ceylon (Templeton, But Mus)

1108. Acanthaspis concunnula, Stal, Ann Suc Ent Fr 1863, p 51

Black, longly pilose; antennæ, posterior lobe of pronotum, corium, margin of abdomen, and legs stramineous, apex of first joint of antennæ, centre and apex of second joint, base, apex, a medial line and interior margin to corium, small marginal spots to abdomen, bases and apices of femora, bases, apices, and annulation to tibiæ, black; head subincrassate, flist joint of antennæ a little shorter than head; lateral angles to posterior lobe of pronotum acute, slightly recuived; scutellar spine subreflexed

Length 9 to 10 millim

Hab Deccan (Stockholm Mus) Burma; Rangoon, Karennee,

Palon, Temzo (Fea)

The Burmese specimens, which I recognize as a varietal form of this species, have the disk of the abdomen beneath stramineous, the autennæ are sometimes unicolorous, sometimes as described above.

1109 Acanthaspis fusconigra, Dohrn, Stett ent Zeit xxi, p 407 (1860), Stäl, En Hem iv, p 74 (1874)

"Dilutely fuscous, head and thorax marked with black; pronotal lateral angles acutely spinous, internal margin of corium and the membrane obscure fuscous, beneath piceous, pilose, abdomen carinate, margin pale spotted with fuscous-testaceous; legs palely testaceous-fuscous, femora striated with fuscous, tibia annulated with fuscous; antenna palely fuscous-testaceous rostrum fuscous, base and apex palely testaceous" (Dolorn)

Length 11 millim Hab Ceylon I have not seen this species—Stål describes it as being allied to A concinnula, but with the pronotal angles more produced, the posterior pronotal lobe totally flavescent, scutellar spine longer, with its apex flavescent; femora longly fuscous, lineately striate

1110 Acanthaspis lineatipes, Reut Act Soc Sc Fenn xii, p 328(1881)

Obscurely fuscous, longly palely pilose, base of first joint of antenne, a small spot on the postocular area of the head above, the rugosities or carrine of the anterior lobe of pronotum, the posterior lobe, anterior lateral angles and medial sulcation (its anterior portion excepted), apex of scutellum, subcostal vein, fascia continued to a third part from apex, then dilated and internally near membrane hookedly curved, quadrangular spots to connexivum, discoidal fascia to abdomen beneath, not reaching apex, prosternal margins acetabular spots, and legs palely flavescent, come and trochanters, longitudinal lines to femora, three annulations to tubice, and apices of tarsi piceous, membrane fuscous

Length 12½ millim Hab Darjeeling

I have not seen this species.

d Pronotum dank, with pale spots and markings.

a' Legs unicolorous.

1111. Acanthaspis trimaculata, Reut Rev d'Ent vi, p 157 (1887)

Body, lostrum, antennæ, and legs black or piceous, fuscously pilose, a large transverse spot, anteriorly medially excised, to posterior lobe of pionotum, and a somewhat round spot behind middle of colium, ochraceous, a large subapical spot to membrane, with its apex emarginate, white, testaceous spots to connexivum, anterior lobe of pronotum a little shorter than posterior lobe, which has its disk unarmed, the posterior lateral angles prominent, shortly dentately produced, their apices suberect, scutellum totally black, apical spine slightly ascendant, rostrum with the first joint a little longer than the second; pronotum with the anterior angles acute, anterior lobe sculptured, posterior lobe with its disk transversely rugulose

Length, 2, 211 millim

Hab "Northern India' (Coll Signoret) Bombay (Leith), Bor Ghát (Dixon)

b' Legs annulated

à Corrum spotted

1112 Acanthaspis rama, sp n

Black; posterior lobe of pronotum with two rounded basal spots, corium with a small basal spot and a larger rounded subapical spot, spots to connexivum above and beneath, apices of femora, two broad annulations to tibie, and the tarsi luteous, first and

second joints of the rostium subequal in length, first joint of the antennæ as long as the head, pronotum with the anterior lobe moderately sculptured, posterior lobe transversely rugulose, posterior angles dentately produced, their apices slightly recurred; scutellar spine obliquely ascendant

Length 18 to 20 millim

Hab Sikhim and Berhampui (Athinson Coll, Brit Mus) In some specimens the spots to the collum are creamy-white.

1113 Acanthaspis micrographa, Walk Cat Het vii, p 177 (1873)

Dark chocolate-brown, two small spots on disk of posterior lobe of pronotum, a small spot on about centre of apical margin to corium, spots to connexisum, subobsolete and subapical aunulation to femora, two annulations to tibiæ, one near base and one near apex, and base of apical joint of tarsi pale ochraceous; a small subapical spot to membrane greyish-white; finely pilose, somewhat longly pilose on legs, rostrum with the first and second joints about subequal in length; antennæ with the first joint about as long as head, pronotum with the anterior lobe prominently sculptured, the anterior angles obtuse, posterior lobe transversely rugulose lateral angles dentately prominent, their apices recuived, disk unarmed; scutellar spine almost horizontally directed.

Length 21 millim

Hab "North Hindostan" (Capt Reid, Brit. Mus)

1114 Acanthaspis tergemina, Burm (Platymers) Handb 11, p 233 (1835), Blanch (Reduvius) Hist Ins 111, p 104 (1840), Stål, En Hem 11, p 73 1874)

Tetrovia (Acanthaspis) scurra, Biedd SB Ges Naturf Beil 1903, p 117

Stoll, Pun ing 298

Black, basal joint of antennæ (excluding apex), four basal spots and lateral angles to posterior lobe of pronotum, sometimes fused, spots to connexivum above and beneath, apices of femora, two broad annulations to tibiæ and base of posterior joint of taisi luteous; commit with basal angle luteous, and a transverse angulated and sinuated subapical spot creamy-white, apex of membrane greyish, enclosing a fuscous apical spot, first joint of rostrum a little longer than second; first joint of antennæ a little shorter than head; pronotum with the anterior lobe moderately sculptured, posterior lobe transversely rugulose, lateral angles shortly dentately produced, their apices slightly recurved, posterior disk unarmed; scutellar spine obliquely ascendant.

Length 16 to 20 millim

Hab Madias (Coll Dist) Cerlon (Green & Lewis), Trincomali (Bist Mus) Burma · Karennee, Palon, Teinzo (Fea)

I am indebted to Herr Breddin for allowing me to see a typical specimen of his species, which is the form having the basal spots and angle of the posterior pronotal lobe fused

1115 Acanthaspis sexguttata, Fabr (Reduvius) Syst Ent p 832 (1775), id Mant 11, p 312 (1787), Stäl, Hem Fabr 1, p 124 (1868), id En. Hem 11, p 73 (1874) Dist A M N H (7) x, p 184 (1902) Cimex edleii, Gmel Syst Nat 1, iv, p 2199 (1788)

Piceous, fuscously pilose, posterior pronotal lobe with four transverse spots and the apices of the lateral angles (the two central spots largest, contiguous, and reaching basal margin) flavous-testaceous, corium with a subbasal and a larger somewhat rounded subapical spot, also a large apical spot to membrane, dull greyish-flavesceut, the membranal spot containing an apical fuscous spot, femora annulated near apex and tibize biannulated with flavous-testaceous, pronotum with the anterior lobe distinctly sculptured, posterior lobe transversely rugulose, centrally sulcate, lateral angles demately produced, their apices recurved, disk unarmed, flist and second joints of rostrum above subequal in length, first joint of antennæ about as long as head, scutellar spine obliquely ascendant

Length 16 to 20 millim.

Hab Mysore, Bangalore (Coll. Dist)

1116 Acanthaspis pustulata, Siâl, En. Hem v, p 73 (1874)

Black or piceous, pilose; a small lateral spot at anterior part of postocular portion of head, four posterior spots and the lateral angles to posterior pronotal lobe, basal angles and a large fasciate spot beyond middle of corium, spots to connexivum above and beneath, apical third of femora and two broad annulations to femora, luteous; an irregular apical spot to membrane greyish-white, enclosing a small fuscous spot; first and second joints of rostrum about equal in length, first joint of antennæ a little shorter than head, anterior lobe of pronotum moderately sculptured, posterior lobe transversely rugulose, lateral angles dentately produced, then apices a little recurved; disk unarmed, scutellar spine obliquely ascendant

Length 14 millim.

Hab Upper Burma (Coll Dist)

b². Corum fasciate

1117 Acanthaspis cincticrus, Stål, Ofi Vet-Al. Foih 1859, p 188, Reut. Rev d'Entom vi, p 157 (1887)

Black, pilose, lateral pronotal spines and a connecting fascia which is sometimes broken, an oblique fascia to corium recurved posteriorly, subapical annulation to femora, two annulations to tibiæ, abdominal marginal spots, and base of apical joint to tarsi luteous; membrane fuscous with the veins black, apex of rostrum castaneous, posterior lobe of pionotum a little louger than anterior lobe, which is tubercularly sculptured, posterior pronotal angles tuberculously spinously produced and iecuived, first and second joints of iostrum subequal in length.

Length 13 to 15 millim.

Hab Assam, East Gáro Hills (Chennell) Burma; Rangoon (Stockholm Mus); Teinzo (Fea)—China, Shantung (Coll. Dist.) Japan (Lewis)

e Pronotum pale, with dark spots and markings.

1118 Acanthaspis inscripta, Dist Ann Soc Ent Belg 1903, p 58.

Head, pronotum, scutellum, antennæ, rostrum, and legs ochraceous; second, third, and fourth joints of antennæ fuscous; eyes, a transverse impression between them, a spot on disk of head, and its constricted base laterally connected with eves, base of first joint of rostrum and apices of second and third joints black; two small spots on anterior margin of pronotum, the transverse constriction, and a spot near each lateral angle black; scutellum with a black central basal spot, corium piceous-brown, its outer and apical areas black, base of lateral margin and a large irregular transverse spot near apex pale ochraceous; membrane piceousbrown, black at basal angle; connexivum above and beneath ochraceous, spotted with black; body beneath ochraceous; a central fascia to head beneath, coxæ, trochanters, irregular lines and spots to sternum, and posterior segmental margins to abdomen black; anterior lobe of pronotum strongly sculptured, posterior lobe finely granulate, the lateral angles produced in short tubercular spines slightly directed upward; scutellar spine well developed and obliquely erect; body moderately pilose, legs strongly prlose

Length 11; breadth between pronotal angles 3 millim.

Hab Ceylon; Kandy (Green)

b Lateral angles of pronotom sounded, not prominent.

1119 Acanthaspis annulicornis, Stål, En Hem iv, p 74 (1874).

Nigro-piceous, pilose, antennæ, two spots on postocular portion of head, and four spots on posterior lobe of pronotum, hemelytra, quadrangular spots to abdominal margin, base and subapical annulation to femora, broad annulation to anterior tibiæ, nearly whole of posterior tibiæ, and tarsi pale dull flavescent; corium with the interior vein (base excepted), a small basal spot, small discoidal spot, a spot at apical margin, and two veins to membrane black; antennæ with the apical half of first joint and base and apex of second joint piceous; posterior lobe of pronotum rugulose, with a distinct longitudinal immersed line which is posteriorly abbreviated; scutellar spine recurved.

Length 14 millim

Hab " North India" (Coll Signoret)

I have not seen this species

1120. Acanthaspis coranodes, Stal, En Hem iv, p 74 (1874).

Black, pilose, a small spot near base and a large discoidal spot

to corum, quadrangular marginal spots to abdomen, narrow obsolete annulation near apices of posterior femora, subbasal annulations to tibiæ, and the tarsi pale, dull, flavescent In structure resembling the genus Coranus (Stal)

Length 10 millim.

Hab Sylhet (Coll Signoret)

I do not know this species

II First joint of antenne short, not passing apex of head

1121 Acanthaspis biguttula, Stall, Ann Soc Ent Iv 1863, p 52

Black; a suboval spot at middle of column and spots to lateral margins of abdomen dull strammeous, head increasated, pronotum with the posterior lobe unarmed, lateral angles prominent, rounded; apex of scutellum acutely produced, spongy furrow to the anterior tibue occupying two-fifths of their length

Length 9½ millim

Hab " India "

I have not seen this species The type is stated by Stal to be contained in the British Museum, but it is not now to be found in that collection

Species known only by immaticic form.

1122 Acanthaspis pedestris, Stal, Ann Soc Ent F. 1863, p 51

Fuscous-testaceous, legs and antennæ och aceous, second joint of antennæ and the taisi very pale och aceous, head with a large spot at base and lateral areas behind eves, pronotum with irregular carinæ, autenor discal spot and anterior angles to anterior lobe, a central and two narrow lateral spots to posterior lobe, fuscous, two central series of spots to abdomen above and spots to connexivum above and beneath flavous-testaceous, hemelytia minute, rudimentary, luteous rostrum with the first joint shorter than the second, first joint of antennæ about as long as head, anterior lobe of pronotum very strongly sculptured, more than twice the length of posterior lobe, which is rugulose; apex of scutellium not produced, abdomen very broad.

Length, 2, 13½ millim
Hab Madras (But Mus)

I doubt the advisability of Stal describing this undoubtedly immature form. It is, however, that of a distinct species, though the structure of the pronotum is unlike that of an Acanthaspid

Species of uncertain position

1123 Acanthaspis unifasciata, Wolff (Reduvius), Ic Cim 11, p 164, f 158 (1804)

"Antennæ five-jointed, black, pilose, head black, subvillose, with an impressed linear frontal line, posteriorly with the ocelli red, the eyes fuscous, rostrum fuscous, pronotum subvillose,

INARA 273

black, anterior lobe longitudinally rugose (sculptured?) posterior lobe transversely rugose, lateral angles acutely spined, between these spines others, shorter, acute, red, scutellum black, its apex recurved, hemelytra black, with a broad medial reddish fascia which is medially dentate anteriorly, membrane black, under wings white, their apices spoted with fuscous; legs black, pilose, tarsi reddish? (In the figure the apices of the femora are also reddish)

Length (taken from figure) 23 millim.

Hab. "India orientalis"

I do not know this species.

Genus INARA

Inara, Stål, Öfi. Vet -Ak Forh 1859, p 190 ud En Hem 1v. p 76 (1874)

Type, I flavopicia, Stål, a Malayan species.

Distribution Oriental Region

Head behind eyes columnar, narrowed to base, before eyes prominently deflected, eyes very large, antennæ with the first joint about as long as from insertion to base of head, distinctly shorter than second joint, rostrum with the first and second joints almost equal in length, pronotum strongly constricted before middle, anterior lobe narrow and globose, posterior lobe with the lateral and posterior angles dentate, scutellum short with a long erect spine, hemelytra not passing abdominal apex; legs moderate in length, anterior femora slightly incrassated; anterior tibiæ with a spongy furrow, posterior tibiæ with the basal joint short and the apical joint long

1124 Inara alboguttata, Stål, Ann Soc Ent Fi 1863, p 53

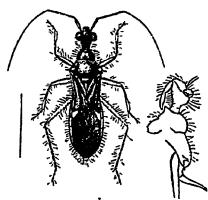


Fig 180 —Inara alboguttata

Shining bluish-black; spine to scutellum and legs reddishochraceous; apex of scutellar spine, apical streaks to anterior and intermediate femora above, apices posterior temora, basal areas of anterior and intermediate tibiæ, the posterior tibiæ and the taisi black; apex of corrum black with a white spot, membrane black, pronotum with a distinct central linear impression at apex of posterior pronotal lobe, its lateral and posterioi angles

dentately produced, head, lateral margins of body and the legs longly pilose

Length 15 million

Hab Tenasserim, Domdami Valley (Bingham, Birt Mus)

Malay Peninsula

Genus EDOCLA

Edocla, Stat, Ofv Vet -Al. Forh 1859, p 189, ad En Hem 1v, p 65 (1874)

Type, E bishisiquata, Stal, a South-African species Distribution Ethiopian and Oriental Regions

Body subelongate, head with the postocular slightly longer than the anteocular portion of head, transversely impressed between eyes, antennæ with the first joint not longer than head, ocelli prominent, pronotum granulate, with the anterior and posterior lateral angles distinctly and somewhat longly acutely spinous, sometimes disk of anterior, sometimes disk of posterior lobe spinous, disks sometimes unarmed, scutellium with a long apical obliquely ascending spine, legs and antennæ pilose, rostrum with the first joint not quite so long as the second, abdomen beneath with a distinct central ridge, sternium granulate

1125 Edocla slateri, Dist A M N. H (7) vi, p 853 (1903)

Piceous; head, antennæ, antenor angles and central disk of anterior pronotal lobe, two central spots near anterior margin, lateral angles, a very small spot before them, and narrow hind margin to posterior pronotal lobe, scutellar spine, base of clavus,

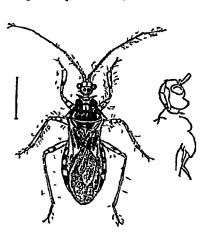


Fig 181 - Idocla slateri

hase and a large subapical spot (extending from lateral to apical maigins, angulate on each side) to commit connezivum, coxe, legs, abdomen, lateral margins of metasternum, and antenor acetabula pale luteous, annulation to first joint of antenna. biannulations to femora and tibiæ, apices of tibiæ, spots to connexivum above and beneath, lateral areas and apex of abdomen, and the membrane pale violaceous biown, antennæ pilose, second joint more than twice the length of first, head transversely constricted behind eves, first

and second joints of rostium about subequal in length, anterior angles of anterior pronotal lobe longly spinous, the spines suberect and a little recurved, anterior lobe sculptured, posterior lobe granulate, lateral angles spinous and recurved, scutellar spine long, suberect.

Length 9; breadth between pronotal angles 3 millim Hab Mysore (Slater, Brit Mus)

VELITRA. 275

1126 Edocla pelia, sp n

Head, anterior lobe of pronotum, scuteitum, and body beneath piceous, finely greyishly pilose; posterior lobe of pronotum and hemelytra pale brownish; apex of spine to scutellum, a large apical subtriangular spot to corium and connexivum luteous, the last spotted with piceous above and beneath, apex of membrane fuliginous; legs luteous, bases and apices of femora, basal, medial and apical annulations to tibiæ piceous, antennæ pilose, with the first and second joints luteous, remaining joints fuscous, second joint almost twice the length of first; transverse incision between eyes very distinct; anterior lobe of pronotum sculptured, posterior lobe thickly and finely granulate, lateral angles spinously produced, directed a little upward and backward; apical spine to scutellum obliquely erect

Length 11 millim

Hab. Pegu (Coll. Dist.) —Aden (Yerbury)

Division LENEARIA.

Body depressed, disk of abdomen beneath distinctly flattered; antennæ inserted close to or not far from the eyes, posterior coxe placed far apart Head, pronotum and coxe unarmed

Synopsis of Genera

A Prosternal process acute, sulcate, posteriorly

a. Antenniferous tubercles well separated from eyes, not laterally prominent

a. Posterior tibiæ and femora almost subequal in length

b Antenniferous tubercles placed very near eyes, laterally moderately prominent

b. Posterior tibiæ longer than posteric femora.

a' Anterior and intermediate femora unarmed

b'. Anterior and intermediate femora shorf, incressate, and denticulate or tuberculate beneath

B Prosternal process straight, not recurved

a Second joint of antennæ four or five times as long as first

b Second joint of antennæ about, or not more than, three times as long as first VELITRA, p 275

LENÆUS, p 278

Paralenæus, p 279

Sminthocoris, p 279

APECHTIA, p 281

Genus VELITRA.

Vehtra, Stål, Hem Afr 111, p 122 (1865), 1d Öfv Vet.-Al. Forh xxv11, p 695 (1870), 1d En Hem 1v, p 64 (1874) Cerilocus, part, Stål, Öfv Vet.-Al. Forh 1859, p 187

Type, V rubropicta, Amy & Serv vol. 11.

Distribution Oriental and Papuan Regions

Body elongately ovate, moderately depressed; basal margin of the pronotum convexly rounded; apex of the scutellum laterally, spinously, elongately produced; posterior coxe placed moderately wide apart, posterior tibies a very little longer than the femora; prosternal process sulcated and posteriorly recurved, disk of abdomen beneath flattened; first joint of antennæ short, second joint at least four times longer, antenniferous tubercles not laterally prominent

A. Posterior lobe of pronotum with three longitudinal series of punctures.

a. Spots to corium elongate, reddish-ochraceous or testaceous.

a. Legs unicolorous

1127. Velitra rubropicta, Amy & Serv (Opinus) Hém p 339 (1843), Stâl, En. Hem 1v, p 69 (1874), Dist A M N H. (7) x, p 189 (1902)

Platymeris discolor, Herr.-Schaff Wanz Int viii, p 31, f. 805

(1848)

Reduvius rivulosus, Walh. Cat. Het vii, p 194 (1873)

Piceous, corium very pale testaceous, base, an elongate spot on each side of claval apex, and a large irregular spot not reaching

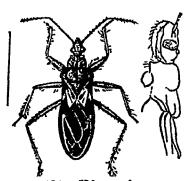


Fig 182 - Velitra rubropicta

apical angle piceous; membrane with the greater part of the venation and apical margin pale ochraceous; antennæ (excluding basal joint), connexivum, tibiæ and tarsi browhish-ochraceous; second and remaining joints of antennæ finely pilose; pronotum with the anterior lobe moderately sculptured, posterior lobe with three longitudinal series of punctures, one central, the others on lateral areas; legs and rostrum pilose, the last with the first joint slightly shorter than the second.

Length 18 to 20 millim.

Hab Sylhet (Browning, Brit Mus). Burma; Palon, Bhamo (Fea). Tenasserim, Malewoon (Fea)—Malay Peninsula, Java, and several islands of the Malayan Archipelago

b Femora palely annulated.

1128 Velitra stigmatica, Dist Ann. Soc Ent Belg 1903, p 59,

Piceous; a broad longitudinal somewhat oblique fascia to corium commencing on disk a little beyond base and terminating

VELITRA 277

on apical margin, a broad central annulation to femora (most distinct on posterior and more obsolete on anterior femora), and the margins of the last two segments of the connexivum both above and beneath reddish-ochraceous

Allied in shape and structure to V. subsepecta, A. & S, but with the membrane unicolorous, femora distinctly annulated, fascia to corium entirely discal and connected with lateral margin, &c.

Length 22 millim.

Hab. Assam; Khási Hılls (Chennell).

b. Spots to corrum transverse, strammeous or creamy-white.

a Legs reddish-ochraceous.

1129. Velitra alboplagiata, Stål (Cerilocus), Öfv. Vel-Ak Forh 1859, p 187, id En Hem iv, p 69 (1874)

Piceous, antennæ fuscous, base of second joint dull testaceous; rostrum, legs, and a somewhat obsolete spot on each side of head behind eyes reddish-ochraceous, apices of femora infuscated; a broad irregular fascia crossing middle of corium and clavus pale ochraceous or creamy-white; connexivum ochraceous or testaceous. In structure resembling V. 2 ubi opicta.

Length 17 to 18 millim

Hab Andamans; Port Blair (Meldola) —Described from the Philippines

b Legs presous.

1130. Velitra sinensis, Walk. (Reduvius) Cat Het vn, p 196 (1873),

Dist A M N H. (7) x, p 189 (1902)

Piceous or black; legs, rostrum and antennæ brownishpiceous; an irregular transverse fascia crossing corium a little
beyond base and extending to inner angle stramineous; membrane
with a small spot at base and centre of inner margin stramineous; basal joint of antennæ darkest; antennæ, legs and rostrum
finely pilose. In structure resembling the preceding species
Walker describes the pronotum as having "hind lobe punctured
with one furrow"; there are, however, three longitudinal series
placed as in V alboplagiata.

Length 131 to 14 millim.

Hab. Ceylon (Green) - China; Hongkong (Brit Mus.)

B Posterior lobe of pronotum centrally broadly sulcate

1131. Velitra maculata, Dist. Ann Soc. Ent. Belg 1903, p 58

Brownish-piceous; base of first joint and second joint (excluding apex) of antenne, bases of second and third joints of

rostrum, five transverse basal spots (sometimes obscure) to posterior lobe of pronotum, a subbasal and discal spot to corium, the second largest and emarginate, sometimes two small claval and subclaval spots, spots to connexivum above and beneath, basal and subapical annulations to femora and tibiæ, and the tarsi pale ochraceous. Disk of pronotum centrally, broadly sulcate, especially on posterior lobe, apex of scutellium longly spinous; legs and antennæ pilose.

Length 10 to 12 millim.

Hab Calcutca (Atkinson). Burma; Bhamo, Teinzo, Palon, Katha (Fea).

Genus LENÆUS

Lenceus, Stal, Ofv Vet -Ak Foih 1859, p 186, id Hem. Afi m, p 121 (1865), id En. Hem. iv p 64 (1874).

Type, L pyrchus, Stål. Distribution Ceylon.

Body depressed; head anteriorly conically produced, behind eyes constricted, with a short basal collar; antennæ with the basal joint reaching apex of head, the second joint nearly five times longer; antenniferous thereles laterally a little prominent; first joint of rostium longer than the second, scutellum with the apex longly straightly produced, intermediate and posterior tibiæ wide apart, the latter rather more so than the former, anterior femora incrassated, but unarmed; anterior tibiæ apically provided with a spongy furrow, abdomen beneath with the disk oblongly flattened, its margins ridged, metasternum tricarinate.

1132. Lenæus pyrrhus, Stål, Öfv Vet-Ak Fork 1859, p. 187, Dist.

A M N H (7) x, p 189 (1902)

Opinus rugicollis, Walk Cat Het vin, p 3 (1873)

Sanguineous, eyes, membrane, and apex of abdomen beneath

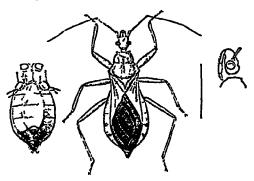


Fig 183 -Lenaus pyrrhus

black, antennæ with the first joint sanguineous, remainder fuscous, base of second joint reddish, anterior and posterior lobes

of pronotum about equal in length, anterior lobe sculptured. posterior obsoletely rugulose, with three longitudinal series of punctures, one central and two lateral.

Length 12 to 13 millim. Hab. Ceylon (Green)

Walker has wrongly described this species. The antennæ ace not black, but the second and third joints are fuscous, the first and base of second testaceous.

Genus PARALENÆUS.

Paraleneus, Reut Act. Soc. Sc Fenn xu, p 321 (1881)

Type, P. pyrrhomelas, Reut. Distribution. Northern India

Allied to Lenœus, but differing by the anterior and intermediate femora being short, incrassate, and denticulate or tuberculate beneath, the apex of the scutellum more constricted and its anterior area more ampliated

1133 Paralenæus pyrrhomelas, Reut Act. Soc Sc Fenn x11, p 322 (1881)

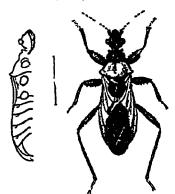


Fig 184 Paralenœus pyrrhomelas.

Black, somewhat glabrous; posterior lobe of pronotum, corium and connexivum sanguineous; more than apical half of clavus, followed by an elongate subclaval spot, and membrane black, opaque; inner angle of membrane pale, containing a small black spot, apex of scutellum, and sixth abdominal segment medially, niceous

Length 11½ millim.

Hab. Darjeeling(StockholmMus) I am indebted to the kindness of Dr Sjostedt for the opportunity of figuring this species.

Genus SMINTHOCORIS, nom. nov.

Sminthus, Stål, Öfv Vet-Al. Forh 1859, p. 186, id Hem. Afr ni, p 120 (1865), id Öfv Vet-Al Förh 1870, p 694 note, id En Hem 1v, p 64 (1874), nec Keys & Blas Mam 1840.

Opinus (part), Lap Ess Hém p 78 (1832).

Tapeinus (part), Lap Ess Hém p 81 (1832). Bergi Rev d'Ent xiii, p 163 (1894); nec Tapeina, Lepell & Serv Col 1825. Tapinus (part), Burmi Handb n, p 236 (1835)

Type, S. pictus, Lap., a Malayan species Distribution Oriental Region and throughout the Malayan Archipelago

Body depressed, head anteriorly coincally produced, antenniferous tubercles laterally prominent, first joint of antenne not reaching apex of head, second joint four or five times as long as first, rostrum with the first and second joints subequal in length, pronotum depressed, before middle transversely compressed, scutellum with the apex longly straightly produced; prosternum elevated, sulcate, narrowed posteriorly; mesosternum flat; intermediate and posterior coxe very widely separated, anterior and intermediate temora incrassated but unarmed, each anterior tibia with a spongy furrow which occupies almost one-half of its length.

1134 Sminthocoris fuscipennis, Stal (Sminthus), En. Hem iv, p 68 (1874), Kirk (Tapeinus) Entomol 1902, p 136

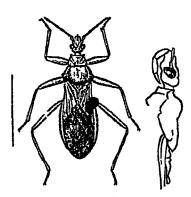


Fig 185
Sminthocoris fuscipennis

Sanguineous; hemelytra black, base of corium sanguineous, lateral fasciæ to body beneath fuscous or piceous, first joint of antennæ sanguineous, second and remaining joints blownish-ochraceous and pilose; posterior lobe of pronotum with three longitudinal series of punctures—one central, the others sublateral, apex of scutellum long, conical, straightly produced

Length 15 to 17 millim.

Hab. Assam, Khási Hills (Chennell) Burma; Karennee (Fea)

1135 Sminthocoris marginellus, Dist (Sminthus) J A & B xlviii, p. 38, pl ii, f 1 (1879)

Sanguineous, head, hemelytra, lateral margins of sternum and abdomen beneath and abdominal segment black, antennæ obscure testaceous, a sanguineous spot behind each eye and base of corium narrowly of the same colour.

Allied to S juscipennis, Stal, from which it differs by the very much more robustly developed eyes and the narrower space between them, the head is slightly more elongated, longitudinal punctures to posterior lobe of pronotum more strongly defined

Length 17 to 18 millim

Hab Burma, Ruby Mines (Doherty) Upper Tenasserini (Limborg).

1136. Sminthocoris greeni, Dist (Sminthus) A M. N H (7) x, p 190 (1902)

Pale sanguineous, head in front of eyes, eyes, area of the ocelli, a small spot on each side of base, anterior lobe of pronotum

(excluding base), lateral margins of posterior lobe, corium, membrane, connexivum, prosternum, lateral margins of meso- and metasterna, lateral areas of abdomen beneath, apices of the femora, and under surfaces of anterior and intermediate femora piceous, tibiæ ferruginous; antennæ brownish-ochraceous, apical joint and base and apex of second joint piceous; base of corium and clavus sanguineous. Posterior lobe of pronotum with three distinct longitudinal impressions; base of scutellum centrally sulcate.

Length 17 millim
Hab. Ceylon (Green, Brit. Mus)

1137. Sminthocoris singularis, Wall. (Reduvius) Cat. Het. vii, p. 198 (1873), Dist. (Sminthus) A. M. N. H. (7) x, p. 189 (1902)

Tapeinus heydeni, Bredd. Wien. ent. Zeit. xxi, p. 23 (1902).

Piceous or black, antennæ, eyes, a small spot behind each eye, corium, connexivum above and beneath, and legs luteous; first joint of antennæ and apical area of corium black; veins and apical margin to membrane luteous; about apical third of femora, a narrow fascia on under surface of anterior femora, and apices of tibiæ (somewhat obsoletely) black, disks of sternum and abdomen brownish-ochraceous, central longitudinal series of punctures to posterior lobe of pronotum profound.

Length 12 to 13½ millim.

Hab "Hindostan" (Brit Mus.). Burma; Palon, Bhamo (Fea).
—Malay Peninsula Borneo (Pryer, Doherty, & Shelford).
Sumatra (Forbes). Java, Philippines (Brit Mus.).

Genus APECHTIA.

Apechtia. Reut. Act Soc Sc Fenn xii, p 320 (1881)

Type, A mesopyrrha, Reut

Distribution Ceylon

Body ovate, depressed; head porrect, with a distinct impression in front of eyes; rostrum with the second joint distinctly longer than the first, antennæ with the first joint not passing apex of head, second about three times longer than first; pronotum very strongly constricted near middle, the anterior angles tuberculously prominent, a distinct central longitudinal impression, posterior margin convexly rounded, scutellum produced in a long horizontal apical spine, prosternal process sulcate, its apex compressed; anterior and intermediate femora incrassated, armed beneath with a series of short tuberculous spines; posterior tibiæ slightly longer than femora. Allied to Sminthocoris, from which it differs principally by the shorter second joint of the antennæ.

1138. Apechtia mesopyrrha, Reut Act Soc Sc Fenn. xii, p. 321 (1881)

Piceous, glabrous; posterior lobe of pronotum, disk of abdomen

beneath, and posterior tibiæ somewhat fuscous-testaceous; corium sanguineous, subopaque, its lateral margin narrowed at base, also apical angle, black; membrane black; apex of clavus, internal area

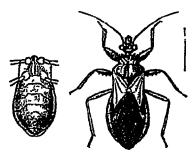


Fig 186 — Apechtia mesopyrrha

of corium, and short basal line at base of membrane between external vein at apex of corium dull flavescent; black vittæ on apical area of clavus and adjoining subclaval area of corium.

Length 10½ millim Hab. Ceylon.

Division CONORHINARIA

Head long, porrect, anteocular portion of head longer, generally very much longer, than postocular area; a more or less distinct and transverse impression between them or immediately behind eyes.

Synopsis of Genera

A Antennæ inserted nearer to apex of head than to

a First joint of rostium longer than second, head about us long as pronotum.

b First joint of rostrum very much shorter than second, head as long as pronotum and scutellum

B Antenne inserted about midway between eyes and apex of head

c First and second joints of rostrum subequal in length, head bifidly produced at apex . . .

d. First joint of lostrum much shorter than second; head not bifidly produced

[p 284. Tiarodes,

[p 287 Linshcosteus,

[p 282

DURGANDA,
[p 285
CONORHINUS,

Genus DURGANDA

Durganda, Amy & Serv Hém p 340 (1843), Sidl, Hem. Afr. 111, p 120 (1865), id En Hem iv, p 64 (1874).

Opinus (part), Lap Ess Hém p 78 (1832)

Tapenus (part), Lap Ess Hém p 81 (1832).

Type, D rubra, Amy. & Serv

Distribution. Oriental Region, and throughout the Malayan

Archipelago

Body strongly depressed; head porrect, anteriorly bifidly produced, strongly compressed between the eyes, ocelli placed widely apart; antennæ iemote from eyes, second joint about twice as long as first; pionotum strongly medially compressed, the posterior lobe broader than the anterior, both lobes finely centrally sulcated, anterior angles tuberculously prominent, posterior angles broadly rounded, prosterium anteriorly sulcate, its process flat, longly posteriorly produced, broad, truncate; intermediate and posterior coxæ placed widely apart, inserted near lateral margins of the body; anterior femora somewhat strongly spined beneath; rostrum with the first and second joints subequal in length

1139. **Durganda rubra**, Amy & Seev. Hém p 341 (1843). Tapemus rufus, Lap Ess Hém p 82 (1832) Var fuscipes, Stål. Öfv Vet -Ak Fork 1866, p 237

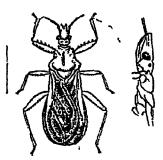


Fig 187 - Durganda rubra

Sanguineous, membrane piceous; abdomen beneath usually much more darkly or obscure reddish; antennæ ochraceous, pilose; anterior lobe of pronotum moderately sculptured, posterior lobe anteriorly finely granulate, legs finely pilose, anterior femora aimed with a series of long spines beneath

Length 10 to 12 milhm.

Hab Assam; Dunsiri Valley (Anderson) Burma; Bhamo(Fea) — Java, Borneo, and other islands of the Malayan Archipelago.

1140. Durganda fulvescens, sp n

Head, pronotum, scutellum, sternum beneath and legs fulvous; abdomen beneath pale luteous; hemelytra piceous, base and inner margin, extending to about half the length of membrane, broadly pale luteous. Allied to D. 10bia, and apart from colour-markings, differing also by the more distinctly produced tuberculous anterior angles of the pronotum, the lateral posterior angles a little more nodulose, transverse impression between the eyes a little more curved, anterior pronotal lobe somewhat less sculptured, &c.

Length 11 millim.

Hab Tenasserum; Tavoy (Coll Dist)

Genus TIARODES.

Tiarodes, Burm Handb 11, p 237 (1835), Amy & Serv Hém p 341 (1843), Stall, Hem Afr 111, p. 120 (1865), 1d. En. Hem. 1v, p 64 (1874)

Cimbus, Lap Ess Hém pp 78 & 80 (1832) Cymbidus, Spnn Ess Hém p 98 (1837)

Type, T versicolor, Lap.

Distribution Oriental Region, and throughout the Malayan

Archipelago.

Body moderately depressed, head long and subcylindrical, anteocular very much longer than postocular area; insertion of antenna very far removed from eyes, ocelli moderately wide apart; prosternum anteriorly profoundly sulcated, the process posteriorly angulated and not much produced, intermediate and posterior coxe about equally separated from the lateral margins and from each other, first joint of the rostrum longer than the second; antenna with the second joint more than twice the length of first; pronotum strongly medially impressed, the posterior lobe wider than the anterior lobe, anterior angles tuberculously prominent, posterior angles broadly rounded

1141 Trarodes meldolæ, Dist Tr E S. 1880, p 152

Sanguineous, head above, apices of femora, bases of tibie, and

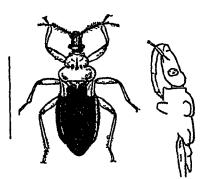


Fig 188 — Trarodes meldolæ

abdomen shining bluish-black, hemelytra (excluding a broad sangumeous basal patch) black, opaque; sternum with two central and two lateral spots on each side bluish-black, antennæ (excluding basal joint) somewhat longly pilose, head finely transversely striate, with a somewhat obsolete central impression, disk of pronotum sulcate, the anterior and posterior lobes subequal in length; scutellum distinctly foveate at base

Length 20 to 22 millim.

Hab. Andamans, Port Blair (Meldola).

1142. Tiarodes versicolor, Lap (Cimbus) Ess Hém p 80 (1882), Blanch (Ectrichodia) Hist Ins 111, p 106 (1840), Burm. Handb 11, p 237 (1835), Amy & Serv Hém. p 342 (1843).

Sangumeous; head above, broad lateral margins; sometimes the whole of the first to fourth segments, to the abdomen beneath,

apices of femora, bases of anterior and intermediate tibre, and the posterior tibre bluish-black, a spot on each side of the penultimate abdominal segment, sometimes the whole of the two last segments, ochraceous; hemelytia and connexivum black, opaque, the first with the basal angles sanguineous, the second with the penultimate segment, or last two segments, ochraceous; anterior lobe of the pronotum a little longer than the posterior.

Var. a Abdomen with an ochraceous spot on each side of abdominal penultimate segment; anterior tibize with apex bluish-

black

Var b Resembling var a, but with anterior tibix wholly bluish-black.

Var c. Last two abdominal segments ochraceous, other segments of connexivum spotted with ochraceous.

Length 15 to 18 millim.

Hab. Sylhet (Stockholm Mus.). Tenasserim; Myitta (Doherty), Thagata (Fea) —Sumatra, Borneo, Java, and other islands of the Malayan Archipelago

1143. Tiarodes elegans, Sidl, Ann. Soc Ent Fr. 1863, p 55.

"Blackish-blue; rostrum, hemelytra, legs, and abdomen sanguineous, the abdomen with the last and anal segments blackishblue; membrane (base excepted) dark fuscous" (Stål)

σ 2. Length 18 millim

Hab Ceylon

I have not seen this species. Stal records the type as being in the collection of the British Museum; but this may have been an error, as it is not to be found there now.

Genus CONORHINUS.

Conorhinus, Lap Ess Hén p 78 (1832), Stål, Beil ent Zeitschi 1859, p 106, id Hem Afi un, p 120 (1865), id En Hem iv, p 64 (1874)

Type, C subrofasciatus, de Geer.

Distribution Nearctic, Neotropical and Oriental Regions, China,

and Madagascar.

Head long, porrect, more or less distinctly impressed behind eyes, rostrum with the first joint very much shorter than second; antennæ inserted on the sides of the head about midway between eyes and apex; occili placed very far apart; prosternum broadly sulcated, abdomen strongly ampliated not centrally carnate, frequently with the disk prominently flattened; posterior tibue longer than the femora

Some of the species of this genus are formidable insects, for instance, C infestans, Klug (=renggeri, Herr-Sch), which, as

Darwin relates in his 'Voyage of the Beagle,' attacks travellers who are camping out on the Pampas of South America, or who are sleeping in outhouses. Before sucking the insects are quite thin, but afterwards they become round and bloated with blood, and are then easily crushed. One which Darwin caught was placed on a table, and, though surrounded by people, if a finger was presented, the bold insect would immediately protrude its rostrum, make a charge, and, if allowed, draw blood Mr Kirby states, 'Text-book of Entomology,' that he has had similar information given him by Mr T Edmonds, who lived for some years in the same country. Although no ill effects follow the attack as detailed above, according to Dr Sharp, in the case of C sangusugus, Leconte, a North-American species, great pain and inflammation ensue, and may end in the gathering and discharge of pus

1144 Conorhinus rubrofasciatus, de Geer (Cimex), Mém iu, p 349, pl xxxv, f 12 (1773), Amy & Serv Hém p 884, pl viu, f 2 (1843), Stâl, Hem Fabr 1, p 123 (1868), Champ Biol. Centr-Amer, Rhynch 11, p. 208, tab xii, f. 22 (1899) Stoll, Pun. f 85.

Piceous-brown, basal margin of head, anterior angles and anterior and lateral margins of pronotum, nearly apical half of



Fig 189
Conorhinus ruhrofasciatus

scutellum, a basal oblique linear streak and a subapical discal spot to corium, connexivum and tarsi ochraceous; connexivum above and beneath spotted with piceous, the spots not quite reaching lateral margins; membrane fuscous; antennæ finely pilose, first and second joints piceous, remainder pale ochraceous; head distinctly granulate, antennæ with the first joint not quite reaching apex of head, second joint about three times the length of first; pronotum coarsely granulate, anterior angles somewhat longly tuberculously pro-

minent, transversely impressed before middle, the anterior lobe moderately subglobose; disk of abdomen beneath distinctly flattened

Length 19 to 23 millim

Hab Sylhet (Stockholm Mus). Bombay (Letth), Bor Ghát (Dixon) Calcutta and Mysore (Ind Mus) Ceylon (Green) Andaman Islands (Ind. Mus) Burma; Toungoo, Mandalay (Fen) —Widely distributed throughout the Malay Peninsula and Malayan Archipelago, recorded from Madagascar; West Africa

(Coll. Dist.); and generally found in the Southern Nearctic and Northern Neotropical Regions and in the Antilles

Nocturnal; usually found in houses in the Bor Ghat (R. M.

Diaon).

Genus LINSHCOSTEUS, nov.

Type, L. carnifex, Dist.

Distribution Northern districts of India

Head cylindrical, porrect, very long, as long as pronotum and scutellum together, sinuately constricted behind eyes, anteocular portion more than three times as long as postocular portion, antennæ inserted much nearer to apex than to eyes, at about one-third from apex of anteocular portion, the first joint not nearly reaching apex of head, second joint as long as anteocular portion of head; antenniferous tubercles laterally prominent; rostrum adpressed to head, reaching eyes, first joint short, second very long; pronotum somewhat short, subtriangular, constricted before middle, posterior lateral angles obtusely prominent; body broad, flattened, lateral abdominal margins much dilated; membrane large, about reaching apex of abdomen; scutellum short, broad, apex produced in a somewhat long, lateral tuberculous spine; disk of abdomen beneath flattened; legs unarmed, femora not incrassated

1145 Linshcosteus carnifex, sp n

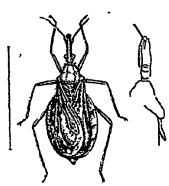


Fig 190 -Linshcos'eus carnifex

Black; head, basal joint of antennæ, rostrum, connexivum, abdomen beneath, and legs piceous; membrane and tarsi brownish-ochraceous; head finely granulate; pronotum with the anterior lobe finely sculptured, anterior angles tuberculously prominent, posterior lobe transversely rugulose; scutellum granulate, its apex transversely striate; eyes greyish; connexivum broad, rounded, a little reflexed, narrowed anteriorly and posteriorly, antennæ and tibiæ very finely pilose

Length 2 24 millim.

Hab "North India" (Brit Mus.)

Species of doubtful generic position.

1146 Cerilocus discolor, Stål, Stett ent. Zeit. xxii, p 146 (1861)

"Fuscous-piceous, shining; collum sanguineous, apical and costal margius, base narrowly, and membrane black, apex of scutellium spinously produced, anterior femora beneath with numerous small spines disposed in double series, disk of abdomen beneath palely coloured" (Stal)

Length 10 millim

Hab Ceylon

The type was described as in Dohrn's collection, and Stal in his subsequent 'Enumeratio Hemipterorum' placed his species in "Species incerti generis." It is probably to be collated near Paralengus and Geobelius 1 have not yet seen a specimen

Subfamily VIII PIRATINÆ.

Piratina, Stal, En Hem 1v, p 4 (1874)

The pronotal characters of the Piratine are very apparent; the transverse constriction is situated behind the middle, and the whole pronotum is of a more or less elongate character; the scutellum, as in the previous subfamilies, is triangular or subtriangular, its apex acuminate, or spinously produced.

A few species belonging to this subfamily have been observed in the act of strictulation, which is doubtless a much more common accomplishment than is generally understood Field entomologists

might with advantage investigate this question

Synopsis of Genera

A Head of moderate length; antennæ inserted near, or not remote from, eyes, intermediate tibiæ generally provided with a spongy furrow.

a Anterior tibue ampliated and incrassated, lateral angles of posterior lobe of pro-

notum ampliated and rounded

b Anterior tubic normal, not ampliated and incrassated, lateral angles of posterior lobe of pionotum obtusely prominent, not ampliately rounded

a Anterior femora compressed and amplated beneath, anterior tibus provided only with a very short or extreme

apical apongy furrow

b Anterior femora neither compressed not ampliated beneath; anterior tibing provided with a well-developed spongy furrow.

a' Pronotum smooth, or with posterior lobe finely granulate

Androcius, p 289

Phalantus, p 290

a². Spongy furrow occupying more than half of anterior tibue

b² Spongy furrow occupying less, or not more, than half of anterior tibiæ

b' Pronotum tuberculonsly granulate .
B Head long, porrect, antennæ inserted remotely from eyes; intermediate tibiæ without a spongy furrow

Естомосовія, р 291.

Pirates, p 297 Catamiarus, p 302.

SIRTHENEA, p 303

Genus ANDROCLUS.

Androclus, Stål, Ann. Soc Ent Fr 1863, p 58, id. Hem. Afr. ui, p 113 (1865); id En Hem iv, p 56 (1874)
Subg Dicraotropis, Mayr, Verh z-b Ges Wien, xv, p 438 (1865), Stål, En Hem iv, p 63 (1874)

Type, A granulatus, Stal

Distribution Oriental Region, some islands of the Malayan

Archipelago, and South-east Africa

Head broad, strongly constructed behind eyes, basal collar short, central lobe elevated, antennæ with the first joint very short, rostrum very thick, second joint longest; pronotum very strongly transversely constructed, lateral margins ampliate, acuminate, tuberculous near anterior angles, posterior angles moderately prominent and rounded, abdomen a little dilated on each side; legs short, anterior femora incrassated, unarmed, anterior tibuæ broad, distinctly flattened above, and provided with a moderately sized apical spongy furrow beneath, posterior tarsi with the last joint slightly shorter than preceding joint

1147 Androclus granulatus, Stall, Ann Soc. Ent Fr 1863, p. 58

Head, antennæ, pronotum, scutellum, and body beneath dark

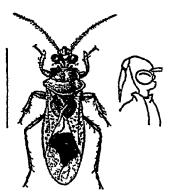


Fig 191 -Androclus granulatus

fuscous brown, corium ochraceous, speckled with brownish; clavus (excluding base) and a subclaval spot adjoining apical half of clavus castaneous-brown; membrane greyishbrown, with a large irregularly shaped discal castaneous-brown spot, the base ochraceous; rostrum, anterior and intermediate legs castaneous-brown, posterior legs fuscous; lateral abdominal margins ochraceous, with more or less distinct large castaneous spots; antennæ pilose, first joint and base of second joint castaneous, second joint a little the longest, third and fourth joints

subequal; pronotum granulate, anterior lobe with a distinct raised

tubercle near each lateral angle; membrane passing abdominal apex.

Length 16 to 17 millim

Hab. Assam, Khási Hills (Chénnell). Deccan (Stockholm Mus.).

1148 Androclus pictus, Herr-Schaff (Pnates) Wanz. Ins viii, p 63 f 827 (1848), Stat (A. Dichraotropis), En. Hem. iv, p 63 (1874)

Androclus (Dichraotropis) sculpturatus, Bredd Soc Entomol xviii, p 4 (1903)

Castaneous, membrane and clavus (excluding base) pale fuliginous; a large central spot to clavus, a large rounded spot on corium outside claval apex, three or four small spots at base, and a very large irregularly shaped discal spot to membrane, dark piceous; spots to connexivum above and beneath, sternum, a series of transverse segmental spots on each lateral area of abdomen, and the posterior legs dark piceous, extreme apices of posterior femora and bases of posterior tibiæ luteous, antennæ pilose, second joint a little the longest, anterior pronotal lobe striate; anterior and intermediate femora incrassate.

Length 101 to 11 millim

Hab Nagpur (Atkinson) Bombay (Coll Dist.).—Java. I also possess a specimen from South Africa, taken at Delagoa Bay (Junod). Transvaal (Brit. Mis.). Dutch East Africa (fide Breddin)

Genus PHALANTUS.

Phalantus, Stal, Ann Soc. Ent F: 1863, p 57, id Hem Afr in, p 113 (1865), id. En Hem iv, p 56 (1874).

Type, P. geniculatus, Stål.

Distribution Ethiopian and Oriental Regions, China and Japan. Head stout, broad, behind eyes moderately constricted, basal collar short; rostrum very stout, second joint longest, apical joint shortest; pronotum behind middle transversely constricted, scutellum with its apex produced; legs of moderate length, anterior femora incrassated, beneath ampliated and finely spinous, anterior tibiæ shorter than the femora, moderately curved, apically truncate, provided beneath with a short apical spongy furrow, posterior tarsi with the second joint a little longer than the third

1149. Phalantus feanus, Dist Ann Soc. Ent. Belg 1903, p. 61.

Black, first, third and fourth joints of antennæ and the legs ochraceous, second joint of antennæ and apex of first joint dull dark castaneous, apices of femora and bases of tibiæ black. Posterior lobe of pronotum and the scutellum very finely granulate, anterior lobe with a fine central linear sulcation, membrane

brownish-piceous, not quite reaching the apex of abdomen

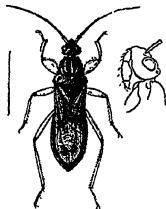


Fig 192 -Phalantus featus

sternum very finely granulate; rostrum with the second joint more or less ochraceous

Length 13 millim.

Hab. Burma, Bhamo (Fea)

1150. Phalantus geniculatus, Stal, Ann Soc Ent Fr. 1863, p 57.

Black; antennæ fuscous, the first joint ochraceous; anterior lobe of pronotum (narrow margins excepted), rostrum, and legs luteous, extreme apices of femora and bases of tibiæ piceous; anterior lobe of pronotum finely, centrally, linearly sulcate, posterior lobe minutely rugulose.

Length 11 millim.

Hab Burma, Bhamo (Fea) — China, Hongkong (Brit. Mus.).

Genus ECTOMOCORIS.

Ectomocoris, May, Verh z-b Ges Wien, xv, p 438 (1865); Stat, Ofv Vet -Al. Fash 1866, p 251

Eumerus, Kluq, Symb 11 (1830), Stål, En Hem 1v, p 56 (1874)
Peirates, Sei ville, Ann So Nat. xxiii, p 215 (1831)
Pirates (part), Burm Handb 11, p 239 (1835); Stål, Hem Afr.

m, p 116 (1865)

Rasahus (part), Amy & Serv Hem p 325 (1843)

Macrosandalus, Stal, Ofv Vet-Ak Fork 1806, p 251 Sphodrocoris, Stal, Ofv Vet-Ak Fork 1866, p 251

Subg Callisphodrus, Stal, Ofv Vet -AL Fork, 1866, p 251

Type, E. quadriguttatus, Fabr

Distribution Ethiopian, Oriental, South-east Palmarctic, and

Australasian Regions

Hend moderately long, anteocular much longer than postocular area, impressed more or less transversely behind eyes, rostrum stout, the second joint longest; antennæ moderately long. first joint incressated, shorter than head; pronotum elongate. YOL. II.

transversely constricted at about one-third from base, lateral margins of anterior lobe subconvex, apex of scutellum moderately produced, lateral margins of abdomen moderately dilated; legs of ordinary length, anterior femora strongly, intermediate femora moderately incrassated, anterior tibiæ about as long as femora, and provided with a spongy furrow which occupies more than half of their under surface

A. Body elongate, head anteriorly produced, as long as anterior lobe of pronotion.

a Legs black, unreolor ous

1151. Ectomocoris horridus, Kirby (Lestomerus), J Linn Soc, Zool axiv, p 111, pl iv, f 16 (1891), Dist (Sirthenea) A M N H (7) a, p 286 (1902)

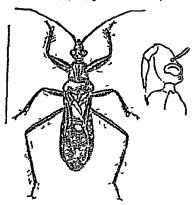


Fig 193 -Ectomocoi is hornidus

Black, apical half of clavus confluent with a somewhat similarly sized spot on colum, and a smaller spot at base of membrane, ochraceous; head elongately produced, as long as anterior lobe of pronotum or second joint of antennæ; antennæ moderately pilose, legs longly pilose, connexivum spotted with ochraceous above and beneath; apex of scutellum slightly reflexed

Length 22 millim

Hab. Ceylon (Green).

Mi. Kirby's description was

founded on an immature specimen. 1152. Ectomocoris erebus, sp. n

Q. Black; tegmina reaching the apex of the fourth abdominal segment, apex of clavus, an adjoining triangular spot on corium and base of inner margin of membrane ochraceous, head long, as long as anterior lobe of pronotum or second joint of antennæ; abdomen somewhat widely dilated, apex of scutellum slightly reflexed; connexivum black, unicolorous

Length 22 millim Hab. Buima (Brit Mrs), Rangoon, Bhamo (Fea)

b. Legs brooler ous.

1153. Ectomocoris rufifemur, Walk (Pirates) Cat Het vii, p.119 (1873), Dist A M N H (7) x, p 282 (1902)

Eumerus insignis, Reut Act Soc Sc Fenn xii, p 317 (1881)

Lumerus ieuteri, Bol Ann. Soc Ent F: 1882, p 464

Black, hemelytra piceous, apical third of clavus, with a small

adjacent vitta on corium, and a large basal spot to membrane greyish - stramineous; femora ferruginous-red, their extreme apices, the under surface of anterior femora, and the tibiæ olivaceous-black; connexioum spotted with ochraceous both above and beneath; head long, about as long as anterior lobe of pronotum or second joint of antennæ.

Length 20 to 23 millim

Hab Ceylon (Thwaites, Brit. Mus.).

The spot described by Walker as near the top of the corium is really in the membrane. Reuter's description of E insignis will correctly replace the pseudo-description given by Walker of his E rufifemur.

1154. Ectomocoris cyaneus, Stal (Pirates), Ann Soc Ent Fi 1863, p 56

Dark indigo-blue; hemelytra fuscous-brown, an apical claval streak, a spot on corium adjoining apex of clavus, and a transverse spot near base of membrane greyish-white, tarsi and the posterior legs ochraceous; antennæ fuscous; head in front of eyes longly produced, a little longer than anterior lobe of pronotum and about as long as second joint of antennæ, apex of scutellum a little reflexed.

Length 22 millim
Hab "India" (Brit. Mus)

Species immature, hemelytra not fully developed

1155. Ectomocorus tibialis, sp n

Q. Black, opaque, first joint and base of second joint of antennæ, rudimentary hemelytra (excluding base and spot at apex), tibiæ and tarsi ochraceous; head anteriorly produced, as long as anterior lobe of pronotum, hemelytra only reaching base of first abdominal segment; spongy furrow to anterior tibiæ occupying three-fourths of their under surface

Length, Q, 17 millim Hab. Bor Ghát (Diaon)

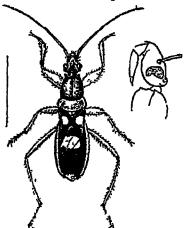
- B. Body moderately elongate, head not promunently anteriorly produced, not so long as anterior lobe of pronotum
 - . a. Pronotum bicolorous, posterior lobe palely coloured.
- 1156. Ectomocoris quadriguttatus, Fabi (Reduvius) Spec Ins 11, p 380 (1781), 1d Syst Rhyng p 277 (1803), Dist A M N H (7) x, p 282 (1902)

 Cimex octomaculatus, Ginel Syst Nat 1, 1v, p 2199 (1788)

Ectomocoris coloratus, May, Verh z-b. Ges Wien, xv, p 438

Pirates sexmaculatus, Walk Cat Het vii, p 116 (1873). Pirates decisus, Walk loc cit. p 118

Piceous-black, posterior lobe of pronotum, antennæ, rostrum,



legs, marginal spots, and sometimes the whole of lateral abdominal margins, ochraceous; hemelytra with two subbasal, a transverse discal, and apical spots pale luteous; antennæ finely pilose, second joint about as long as anterior lobe of pronotum, which is smooth and obscurely longitudinally striate, legs pilose Length 14 to 17 millim.

Hab North Bengal (But Mus), Bombay, Bor Ghát (Duxon); Pondicherry (Coll. Sugnoret) Ceylon (Green)

Walker, in his description of Fig 194.- Ectomocoris quad. iguitatus P. decisus (supra), has omitted to mention that the posterior

lobe of the pronotum is testaceous

1157 Ectomocoris posticus, Walk (Printes) Cat Het vii, p 115 (1873), Dut A M N H (7) x, p 282 (1902) Eumenes flaviger, Stal, En Hem. 1v, p 61 (1874)

Black, apex of head, antennæ, rostrum, posterior lobe of pronotum, connexivum above and beneath, lateral maigins of mesoand metasterna, and legs ochraceous; corrum luteous, membrane black, its basal area luteous, its apex obscure greyish, antennæ pilose, second joint almost as long as pronotum, spongy furrow occupying more than two-thirds of under surface of anterior tibiæ.

Var. Membrane with a black basal spot

Length 16 to 18 milum.

Hab "North India" (Brit Mus.) - Egypt, Ghizeh (Flower, Brit. Mus.)

b. Pronotum unicolorous

a Legs ochraceous, unreolorous

1158 Ectomocoris ochropterus, Stål, Ofv Vet -Ak Fork 1866, p 250, Reut (Eumerus) Act Soc Sc Fenn x11, p 314 (1881)

Black, first joint and basal area of second joint of antenne, rostrum, clavus, corium, basal third of membrane, lateral margins of abdomen and legs ochraceous, inner margin of clavus, a linear fascia near lateral margin of corium, and apex of membrane fuscous; second joint of antennæ shorter than anterior lobe of pronotum, which is extremely finely granulate; legs sparsely finely granulate

Length 19 to 20 millim.

Hab Bengal; Sihebganj (Coll Dist.), Calcutta, Berhampur (Atkınson, Brrt. Mus)

1159 Ectomocoris cordatus, Wolff (Reduvus), Ic. iv, p 163, f 157 (1804), Stål (Eumerus), En. Hem. iv, p 61 (1874).

Peirates singalensis, Dohrn, Stett ent Zeit. xxi, p 408 (1860)

"Black, hemelytra with the clavus, a spot confluent with the clavus, a spot at base and apex of membrane, lateral margins of abdomen, legs, rostrum, and autennæ flavous-testaceous; apices of the femora palely fuscous." (Dohin)

Length 12½ millim.

Hab. Ceylon (Stockholm Mus)

I have not seen this species.

1160. Ectomocoris elegans, Fabr (Reduvius) Syst Rhyng p 270 (1883), Still, Hem Fabr 1, p 121 (1868), Dist A M N. H (7) x, p 282 (1902)
Pirates inscriptus, Walk Cut Het vii, p 115 (1873)

Black; apex of head, rostrum, first joint and base of second joint of antennæ, coxæ, trochauters and legs ochraceous, clavus, corium and connexivum (excluding apex), and base of membrane luteous base of claval suture, an oblique subclaval spot, and two linear fasciæ (outermost shortest), near lateral margin of corium, and a transverse macular fascia near base of membrane purplish-black, second joint of antennæ about as long as anterior lobe of pronotum; head ochraceously sericeous, anterior pronotal lobe with some almost obsolete longitudinal striations.

Length 15 to 18½ millim.

Hab Burma, Rangoon, Minhla (Fea) Tenasserim, Kawkareet (Fea)—Siam (Brit. Mus.), and found in several islands of the Malayan Archipelago; Timor (Doherty)

1161. Ectomocoris cordiger, Stål, Ofv Vet -Ak Fork 1866, p 256.
Dist. A. M N H (7) x, p 283 (1902)
Pirates adjunctus, Walk Cat Het. vn, p 114 (1873)

Piceous, opaque, pronotum and scutellum olivaceous-black, shining; antennæ, greater part of second and third joints of rostrum, small spots to connexivum above and beneath, and legs ochraceous, apical half of clavus confluent with a somewhat similar-sized spot on corium, also a small spot on outer area of basal cell to membrane, luteous; legs and antennæ distinctly

pilose; second joint of antennæ about as long as anterior lobe of pronotum.

Length 12 to 15 millim.

Hab North Bengal (Brit. Mus). Sylhet (Stockholm Mus.) Bombay; Bor Ghát (Dixon). Ceylon (Green) — Persian Gulf (Brit. Mus)

b. Legs black, unicolorous.

1162 Ectomocoris vishnu, sp n.

Black; apical third of clavus, a large subrounded spot on corium adjacent to apical half of clavus, and a small spot to membrane near the apical angle of corium ochraceous, antennæ and legs strongly pilose, second joint of antennæ as long as anterior lobe of pionotum, which is longer than head, apex of rostrum castaneous; abdomen mutilated in specimen described, spongy furrow to anterior tibiæ almost extending to base

Length 20 millim

Hab Bombay (Coll Dist)

c Legs not unicolorous

1163. Ectomocoris atrox, Stål (Pirates), Öfv Vet-Al Forh 1855, p 187, id (Eumerus) En. Hem 1v, p 62 (1874), Dist A M N H (7) 1, p 282 (1902)

Penates fuscicornis, Dohrn, Stett ent Zeit xxi, p 408 (1860)

Pinates diffinis, Wall Cat Het vii, p 120 (1873)

Pirates ypsilon, Kirby, J Linn Soc, Zool xxiv, p 113, pl 1v, f. 8 (1891)

Pirates stigmativentris, Kirby, loc cit p 112 (immature form)

Piceous-black, hemelytra purplish-black; a spot at base of membrane and the discal vein, spots to connexivim, apices of coxæ, and legs pale ochraceous, trochanters, anterior femora, apical halves of intermediate and posterior femora black, antennæ cchraceous, first joint black, its base ochraceous, apical joint of rostrum castaneous; antennæ finely pilose, legs more longly pilose

Length 12 to 18 millim

Hab Bengal (Stockholm Mus) Ceylon (Green). Burma, Rangoon, Palon, Bhamo, Karennee (Fea)—Found in the Malay Peninsula and many islands of the Malayan Archipelago North China (Brit Mus).

1164 Ectomocoris gangeticus, Beigr (Pirates) Rev d'Ent xiii, p 162 (1894)

Black; clavus (base and extreme apex excepted) and an oblong adjacent spot on corium, a large spot at anterior basal angle of membrane and its apical area, and base of posterior femora pale

297 PIRATES.

ochraceous; apical joint of rostrum and spots to connexivum above and beneath pale obscure piceous; head a little shorter than anterior lobe of pronotum; antennæ absent in typical specimen, in the female the anterior pronotal lobe nearly four times the length of posterior tibiæ; hemelytra only reaching the base of the fifth abdominal segment, spongy furrow to anterior tibie occupying the greater part of their under surface.

Length 12 millim.

Hab Banks of the Ganges.

I am indebted to Dr Bergroth for an opportunity of examining this species

Genus PIRATES.

Peirates, Seiv Ann Sc Nat xxin, p 215 (1831), Lap Ess pp. 6, 9,

& 78 (1832)

Pirates, Burn (part) Handb n, pp 222 & 239 (1835), Amy. § Serv Hom p 324 (1843), Stal, Ofi Vet-Ak Forh 1866, p 250, id En Hem iv, p 56 (1874).

Subg Fusius, Stal, Stett ent Zeit xxii, p 458 (1862).

Subg Microsandalus, Brachysandalus, Cleptocoris, Stal, Ofv. Vet-Ak Forh 1866, pp 250, 251

Subg. Spilodermus, Stal, Hem Fabi i, p 122 (1868)

Lestomerus, Amy & Sein Hom p 322 (1843)

Lestomerus, Amy & Seiv Hém. p 322 (1843).

Type, P hybridus, Scop., a Palæarctic species.

Distribution, Palearctic, Ethiopian, Oriental, and Australasian

Regions.

This genus possesses all the general characters of Ectomocoris, and is distinguished from it by the spongy furrow of each anterior tibia not occupying more than half its length

- A. Anterior femoia minutely tuberculously spinose beneath.
 - a Legs wholly flavescent
 - a. Hemelytra unspotted.

1165 Pirates flavipes, Walk. (Lestomerus) Cat. Het vii, p 93 (1873); Dist A. M N H (7) x, p 287 (1902).

Head, scutellum, hemelytra, and body beneath purplish-black: anterior lobe of pronotum, lateral margins of scutellum, and submarginal longitudinal vein to corium olivaceous-green; posterior lobe to pronotum purplish-bronzy; first joint of antennæ, rostrum (excluding base), and legs luteous, extreme apices of anterior and intermediate tibiæ piceous; second joint of antennæ as long as pronotum; anterior and intermediate femora tuberculously spinous beneath · apex of membrane fullginous

Length 17 millim

Hab "North India" (Brit. Mus.). Kangra Valley (Dudgeon) Bengal; Berhampur (Atkinson).

Mr Dudgeon sent a specimen of this species, taken in the

Kangra Valley, to the British Museum with the information that "the insect makes a creaking noise when held between the fingers. moving the thoial up and down similar to the action of some Longicorn beetles. It has a most loathsome scent," The Palæ. arctic species P hybridies, Scop (=stridulus, Fabr), is also known to stridulate

b. Hemelytra palely spotted

1166. Pirates punctum, Fabr (Reduvius) Ent Syst. iv, p. 203 (1794), ad (Reduvius) Syst Rhyng p. 277 (1803) Pirates instabilis, Walk. Cat Het vii, p 118 (1873)

Piceous, head, antennæ, rostrum, pronotum, connexivum (above and beneath), lateral margins of sternum and legs ochraceous; a large spot occupying apical half of clavus and adjoining portion of corium luteous; antennæ pilose, apex fuscous, second joint as long as pronotum, basal angles of posterior lobe of pronotum distinctly dentately produced; spongy furrow to anterior tibiæ occupying not more than a third of the under surface, anterior femora minutely tuberculously spinous beneath.

Length 15 millim

Hab. North Bengal (Campbell, Brit. Mus.).

The type of Fabricius is contained in the Banksian Collection belonging to the British Museum

b Legs flavescent, applies of femora fuscous

1167. Pirates sanctus, Fab. (Reduvius) Mant 11, p 310 (1787)

Wolf, Ic 11, p 80, f. 77 (1801), Walk (Lestomerus) Cat

Het vii, p 94 (1873), Dist A M N H (7) x, p. 283 (1902)

Cimex sacer, Gmel Syst. Nat i, iv, p 2197 (1788).

Pirates latifer, Walk. Cat Het vii, p 119 (1873) Stoll, Pun f 62

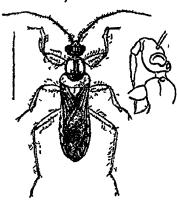


Fig 195 -Prrates sanclus

Luteous, eyes, narrow lateral margins and a central longitudinal fascia to anterior pronotal lobe, anterior marginal area of posterior pronotal lobe, hemelytra, transverse spots to connexioum above and beneath, lateral areas of prosteinum, meso- and metasterna (excluding margins), segmental fascize and apex to abdomen, apices of femora and tibiæ, and anterior femora beneath black or piceous; antennæ pilose, second joint almost as long as pronotum, anterior pronotal lobe

with a central fine linear sulcation, merged in a foveate spot

PIRATES 299

near base; anterior and intermediate femora tuberculously spinous beneath.

Length 14½ to 15 millim

Hab Sind (Call Dist) North Bengal (Campbell, But Mus)
Ceylon (Green) Burma; Mandalay (Bingham)

c. Legs black, bases of femora flavescent

1168. Pirates femoralis, Wall. (Lestomerus) Cat Het vn, p 92 (1873), Diet A M. N H (7) x, p 284 (1902)
Pirates (Lestomerus) cruciatus, Hoi v Term Fuzetek, in, p 148, pl vn, f 5 (1879)
Pirates bicoloripes, Bredd Abh Ges. Halle, xxiv, p 101 (1901)

Piceous-black; pronotum and scutellum shining olivaceous; trochanters and femora (excluding apices) ochraceous, antennæ pilose, second joint about as long as pronotum, anterior lobe striated much the same as in P. affinis but more foreately impressed centrally, posterior pronotal lobe much more distinctly transversely rugulose; anterior and intermediate femora tuber-culously spined beneath

Length 16 to 20 millim.

Hab. Burma; Bhamo, Palon (Fea)—Also found in several islands of the Malayan Archipelago, Celebes (von Hasselt)
North China (Coll. Dist). Shanghai, Hongkong (Brit Mus)

Although Walker described only the four anterior femora as being "towards the base" "tawny," the whole of the femora are reddish, varying in extent of that coloration from the base

d. Legs wholly black or brown.

1169. Pirates affinis, Serv (Peirates) Ann Sc Nat vviii, p 216 (1831), Amy & Serv (Lestomerus) Hem p 323 (1843), Dist A M N H (7) x, p 284 (1902)

Lestomerus affinis, var p, Walk Cat Het vii, p 91 (1873)

Lestomerus piceipennis, Walk tom cat p 92

Var Lestomerus diffinis, Walk loc cat

Pinates walkeri, Leth & Sev Cat Gén Hém t. 111, p 127 (1896)

Piceous-black, pronotum and scutellum shining olivaceous; antennæ pilose, second joint about as long as pronotum; anterior pronotal lobe strongly striate, the striæ longitudinal on disk and oblique on lateral areas, posterior pronotal lobe obscurely transversely rugulose, anterior and intermediate femora somewhat strongly spined beneath

Var. Connexivum above and beneath sanguineous

Length 17 to 21 millim.

Hab Assam, Khási Hills (Chennell) Bombay (Leith). Burma Rangoon, Teinzo, Bhamo (Fea) —Also recorded from the Malav Peninsula, Cochinchina, Java, and some other islands of the Malayan Archipelago

1170. Pirates bicolor, Dist Ann. Soc. Ent Belg. 1903, p 61

Head, anterior lobe of pronotum, and scutellum indigo-black, posterior lobe of pronotum, corium and membrane dark brownish-ochraceous; body beneath and legs dark brownish-ochraceous, anterior femora and thim, intermediate and posterior femora, sternum, central and lateral fascim and apex to abdomen dark purplish-brown, antennæ brownish-ochraceous, pilose, basal joint darkest, second joint about as long as pronotum, anterior lobe of pronotum centrally sulcate, the lateral areas irregularly striate, legs and antennæ somewhat strongly pilose, anterior and intermediate femora tuberculously spinous beneath.

Length 19 millim.

Hab. Assam; Nága Hills (Chennell)

B. Anterior femora not spanose beneath.

a. Membrane spotted or marked with greyish.

1171 Pirates quadrinotatus, Fab. (Reduvius) Ent Syst Suppl p 544 (1798), id Syst Rhyng p 277 (1803), Stâl (Spilodermus), Hem. Fab. i, p 122 (1868) Peirates biguttatus, Dohrn, Stett ent Zeit. xxi, p 407 (1860)

Black, beneath with legs somewhat greyishly sericeous; posterior lobe of pronotum, scutellum, clavus, corium, and posterior lateral margins of prosternum cinnamon-brown; posterior inner area of corium black, membrane with two spots (one anterior, the other posterior) and a line on basal margin white, spots to connexivum above and beneath, apices of coxe, and bases of intermediate and posterior femora luteous; apex of scutellum distinctly recurived; antennæ pilose, second joint almost as long as pronotum, femora unarmed beneath; spongy furrow to anterior tibiæ not occupying more than about a third of their length

Length 9 to 10 millim

Hab Sylhet (Stockholm Mus). Ceylon (Green)

1172 Pirates arcuatus, Stål (Spilodermus), Öfv Vet-Akad Fork 1870, p 692, Diet A M N H (7) x, p. 284 (1902). Pirates mutilloides, Walk Cat. Het vii, p 120 (1873)

Black, moderately griseous-sericeous and pilose, pronotum, scutellum, clavus, and basal half of corium dark cinnamon-brown, an arcuated transverse fascia near base of membrane, and a subapical rounded spot, spots to connexivum above and beneath, coxe (excluding bases), nearly whole of trochanters, and bases of intermediate and posterior femora greyish flavescent; second joint of antennæ about as long as anterior lobe of pronotum, which is distinctly more or less longitudinally striate

Length 91 to 11 millim

PIRATES. 301

Hab. Sylhet (Bowring, Brit. Mus). Assam; Margherita (Doherty). Burma; Karennee, Teinzo, Bhamo, Katha (Fea). Tenasserim; Thagata (Fea) —Described from the Philippines.—Lethierry and Severin in their Catalogue add China and Japan, but for these localities I possess no confirmation.

1173. Pirates mundulus, Siâl, En Hem. 1v, p 58 (1874), Reut Act Soc Sc Fenn x11, p 311 (1881)

Black; abdomen and hemelytra testaceous, clavus and corrum inwardly lurid, and there marked with a black spot; anal segment of abdomen black; membrane fuscous; interior areola and a medial oblique fascia white, before the fascia marked with a black spot, the exterior areola black, the apical spongy furrow to anterior tibize occupying little more than a third part of their under surface. In some varieties, perhaps confined to the female sex, the disk of the abdomen beneath is dark fuscous, the connexivum alone being testaceous

Length 9 millim

Hab Tranquebar (Stockholm Mus) Bor Ghát (Diwon). Ceylon, Peradeniya (Green).

b. Membrane spotted with black.

1174 Pirates atromaculatus, Stål (Cleptocoris), Ofv Vet -Ak Fork 1870, p 692, Dist A M N H (7) x, p 283 (1902) Pirates sinensis, Walk Cat Het vii, p 114 (1873)

Black, hemelytra piceous; corium with a medial longitudinal ochraceous fascia which is inwardly ampliated and angulated and there margined with black; a large discal spot to membrane and a small spot near base of clavus black; antennæ pilose, second joint about as long as anterior lobe of pronotum; anterior femora unarmed beneath; spongy furrow to anterior tibiæ not occupying much more than a third of their length

Length 12 millim

Hab. Assam, Khási and Niga Hills (Chennell) Ceylon (Green). Burma; Karennee, Katha, Metanga, Schwegoo-Myo (Fea).—Also recorded from Java, Philippines (Semper), Hongkong (Bowring, Brit Mus.)

c Membrane fuscous, unicolorous

1175. Pirates lepturoides, Wolff (Reduvius), Ic iv, p 165, f 159 (1804), Stal, Ofv Vet -Al Foil 1806, p. 262

Piceous-black; corum fuscous-brown, a small spot at inner angle near base of membrane, and the membrane, fuscous, connexivum above and beneath spotted with obscure ochraceous, antennæ pilose, second joint about as long as anterior pronotal lobe, which is centrally longitudinally linearly impressed; anterior femora unarmed beneath; spongy furrow to anterior

tibiæ occupying but little more than a third part of their under surface.

Length 9 to $10\frac{1}{2}$ millim

Hab. Bombay; Khandála (Dixon). Ceylon (Green). Burma, Bhamo, Katha (Feu) — Also recorded from Java and Borneo.

Lethierry and Severin (Cat. Gén. Hém t 111. p. 126) have included Pirates sinicus, Walk (tinicus misprint) Cat Het vii, p 121 (1873), as a variety of this species. The type of Walker's species is, however, missing, and is therefore better ignored.

Lestomerus formicarius, Walk. Cat. Het. vii, p. 94 (1873)

The type of this species, described from Burma, is not now to be found in the British Museum. It must therefore, owing to the unreliability of Walker's descriptions, be treated as non-existent.

Genus CATAMIARUS.

Catamiarus, Amy & Serv. Hém p 323 (1843), Stål, Hem. Af 111, p 113 (1865).

Type, C brevipennis, Serv

Distribution Oriental and Ethiopian Regions

Body broad, robust, pronotum tuberculously granulate, the granulations on anterior lobe being in longitudinal series on disk and in oblique series on lateral areas, head with the anteocular considerably longer than the postocular area, more or less transversely impressed behind eyes, antennæ pilose, first and second joints moderately robust; rostrum stout, second joint much longer than first; pronotum with the anterior angles tuberculously

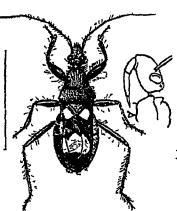


Fig 196 — Catamiarus bi corpennis

prominent, transversely constricted at about one-third from base, lateral angles subprominent; lateral margins of the abdomen dilated, apex of scutellum robustly elongated; each anterior tibia provided apically with a spongy furrow, which is not much more than a third of its length

1176. Catamiarus brevipennis, Serv (Peirates) Ann Sc Nat xxii, p 217 (1831), Amy § Serv Hém p 323 (1848)

Black; a large, somewhat rounded spot on corrum ad-

joining apex of clavus, and a very large transverse discal spot to membrane ochraceous, head with the lateral margins hirsute,

antennæ pilose, first joint about as long as from insertion to base of head, second as long as anterior lobe of pronotum; legs and margins of body longly pilose or hirsute.

Length 20 to 26 millim

Hab. Hardwar (Wood-Mason). Cutch (Ind. Mus). Madras (Coll Dist). Mysore (Ind. Mus.) Bangalore (Cameron).

Genus SIRTHENEA.

Sirthenea, Spin Ess Hém p 100 (1840), Stål, Hem Afi 111, p 113 (1865), id En Hem 11, p 56 (1874)
Rasahus (part), Amy & Serv Hém p 325 (1843)

Type, S carinata, Fabr., a Nearctic species.

Distribution Nearctic, Neotropical, Ethiopiun, and Oriental

Regions.

Head long, subporrect, anteocular portion very much the longest; antennæ inserted remotely from eyes; rostrum with the third joint slender and longer than first joint, second at least twice the length of first, pronotum with the apex distinctly sinuate, anterior angles not tuberculate, rounded or subprominent; mesosternum carinate, intermediate tibiæ without a spongy furrow.

Sirthenea flavipes, Stål (Rasahus), Ofv Vet-Al. Fo.1 1855, p 187, vl En. Hem iv, p. 57 (1874), Dist A M N H (7) x, p 286 (1902)
 Rasahus cumingi, Dolirn, Stett ent Zeit xxi, p 407 (1860)
 Pirates strigifer & basiger, Walk Cat. Het vii, pp 116, 117 (1873)

Black; head, anterior lobe of pronotum, and disk of abdomen beneath pale castaneous, first joint of antennæ, base of second,

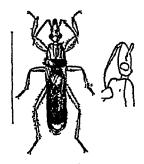


Fig 197 -Sirthenea flampes

and third excluding base, base and apex of clavus, base and a subclaval apical spot to comum, apex of membrane, rostrum, legs, spots to connexivum above and beneath, and a large lateral basal and apical abdominal spot luteous; autennæ pilose, first joint not reaching apex of head, second about as long as anteocular portion of head.

Length 19 to 21 millim.

Hab. Assam; Nága Hills (Doherty) Ceylon (Green).—Java, Borneo, Philippines. China; Hongkong, Amoy (Brit. Mus.) Japan (Lewis). Formosa (Brit. Mus.).

Subfamily IX ECTRICHODIINÆ.

Ectrichodiina, Stal, En. Hem iv, p 4 (1874)

This subfamily is easily recognized by the structure of the scutellum, which has its apex broad, and with two, sometimes

three, apical spinous angulations.

It is widely distributed, except in the Palæarctic Region, where it appears to be found only in the extreme eastern province; there are not very many Nearctic representatives, and the Ectrichodium are mainly tropical insects.

Synopsis of Genera.

The primary character for dividing the genera in this subfamily is found in the number of joints of the antenne. Two genera, Antropula, Stål, and Quercetanus, Dist, are only represented by specimens in which these fragile organs are imperfect. They must therefore be left out of this synopsis for the present, but both genera are easily recognized by other characters, and figures are given of both

A Antennæ with eight joints a. Scutellum with two apical spinous angulations a Rostrum with first joint longer than remaining joints together. a' Head long, about as long as anterior femora a² Connexivum with its margin even, not spined b' Head not prominently elongated. b2. Connexivum with basal segment spinously produced b Rostrum with first joint about as long as remaining joints together b. Scutellum with three apical spinous angulations, the middle one minute. B Antenne with seven joints a. Anterior femora unarmed a Antennæ with first joint about as long as head, eyes not unusually prominent & Antennes with first joint much

longer than head, eyes exceedingly

prominent

AUDERNACUS, p. 306

BAYERUS, p 307

SCADRA, p 308

Ествуснотев, р 314

Mendis, p 312

LIBAVIUS, p 313

b Anterioi femora strongly spined near apex

C. Antennæ with six joints; anterior femora strongly incressated

Abdomen above rugose, not globose
 Abdomen beneath not longitudi-

b Abdomen beneath with the first four segments distinctly centrally divided .

b Abdomen globose, above levigate, not rugose.

D Antennæ with four joints; anterior femora very slightly incrassated ...

Labidocoris, p 313

PHYSORHYNCHUS, p 318

STEGIUS, p 322

ERIXIMACHUS, p 323

Vilius, p 324

Genus ANTIOPULA.

Antiopa, Stål, Ann Soc Ent F. 1863, p 47, id En Hem. iv. p 56 (1874), nom præcec Antiopula, Bergr Rev d'Ent xiii, p 163 (1894), nom n.

Type, A pumila, Stal. Distribution Cevlon

Body small; head large, above and beneath convex, behind eyes increasated, and at base strongly constricted; occili moderately prominent, rostrum with the first and second joints subequal in length; antennæ short, first joint shorter than the head, though passing the apex of same, second a little longer than first:

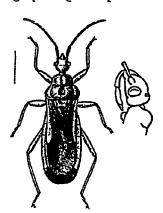


Fig 198 -Antropula pumila

pronotum transversely constricted before middle, longitudinally impressed on disk and near lateral angles; scutellum transverse, the lateral apical angles widely separated, legs moderately short; anterior femora a little thickened but unarmed, spongy furrow to anterior tibiæ small.

1178. Antiopula pumila, Stål (Antiopa), Ann Soc. Ent Fr. 1863, p 47.

Coral-red, antennæ legs and hemelytra fuscous-black, the two apical joints of the antennæ white; lateral margins of corium

coral-red; the last dorsal segment of the abdomen, the dorsal lateral margin of the two apical segments, the posterior area of the last segment beneath, and the anal segment black; the longitudinal impressions to the pronotum and the transverse ventral incisures slightly carinate.

Length, Q, 8 millim. Hab. Ceylon (Brit. Mus)

Beyond the type in the British Museum, I have not seen another specimen.

Genus AUDERNACUS, nov

Type, A atropictus, Dist

Distribution Burma; Tenasserim; Andaman Islands

Head long, about as long as anterior femora, anteocular slightly shorter than postocular portion, strongly constricted behind eyes, about halfway from eyes to base it is moderately tunid and then narrowed into a cylindrical collar, antennæ eight-jointed, inserted at less than halfway between eyes and apex, first joint very much shorter than head but considerably passing its apex, rostrum with the first joint longer than remaining joints together. Pronotum with the anterior lobe very much shorter and narrower than the posterior lobe, tunid, and profoundly centrally suicate, posterior lobe with three longitudinal impressions, one central, and one on each lateral area, the last profound and giving the

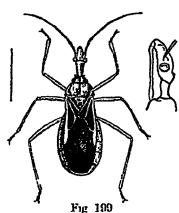


Fig 199 Indernacus atropulus

lateral angles a nodulose appearance. Scutellum scarcely narrowed posteriorly, the apical angulations wide apart, abdomen moderately dilated on each side, legs slender, anterior femora scarcely thickened and unarmed

1179. Audernacus atropictus, Dist (Santosia) Ann Soc Ent Belg 1903, p 62

Sanguineous, corium (excluding lateral margins, apex, and veins) fuscous, membrane black, antennæ becoming fuscous towards apex; anterior angles of pronotum moderately tuberculous,

pronotum with both lobes centrally sulcate, posterior lobe sulcate on each lateral area and foveate near each lateral angle; connexivum broad, head longer than the pronotum

Length 12 millim

Hab. Burma, Karennee (Fea). Tenasserim, Plapoo (Fea).

1180 Audernacus andamanensis, sp. n

Coral-red; corrum reddish-testaceous, clavus and a subclaval streak to corrum ochraceous; membrane black, its basal margin

ochraceous, antennæ with the basal joint coral-ied, remaining joints fuscous; abdomen mutilated in specimen described; tarsi fuscous

Length 15 millim

Hab. Andaman Islands (Brit. Mus.).

An imperfect specimen in the British Museum is the type of this very distinct species.

Genus BAYERUS, nov

Type, B cuneatus, Dist. Distribution Assam.

Antennæ apparently eight-jointed, first joint longer than head and longly passing its apex, head stout, broad, somewhat tumid behind eyes, with a short distinct collar; rostrum with the basal joint longer than the two apical joints together; pronotum with the anterior lobe narrower than the posterior, distinctly sculptured and profoundly centrally sulcate, posterior lobe with three longitudinal impressions, one central and one on each lateral

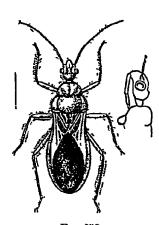


Fig 200 Bayerus cuneatus

area, lateral angles rounded and nodulose; scutellum distinctly narrowed posteriorly, foveate at base, the two apical spinous angles inwardly curved and not widely separated; basal segment of the connexivum somewhat strongly spinously produced, anterior tibiæ with a very short and subobsolete apical spongy furrow.

1181. Bayerus cuneatus, sp n

Sanguineous, antennæ, disk of scutellum, clavus and broad claval streak on corium, and tibiæ (excluding extreme bases and apices) fuscous; membrane black; antennæ longly pilose, base of first joint

sanguineous, second a little longer than first, legs somewhat longly pilose.

Var. Legs entuely sanguineous; claval fuscous streak on corium angularly dilated posteriorly.

Length 9 millim.

Hab. Assam; Nága Hills (Chennell).

The type, a specimen without locality belonging to the Atkinson Collection, is in the British Museum.

Genus SCADRA.

Scadra, Stat, Ofo Vet -Ah. Forh 1859, pp 176 & 182, ad En. Hem iv, p 48 (1874)

Type, S. lansus, Stal, a Malayan species.

Distribution Oriental Region

Head ovate, behind eyes a little narrowed, collar short; antennæ eight-jointed, basal joint slightly shorter than head but longly passing its apex; pronotum before middle transversely constricted, the impression rugose, posterior lobe obsoletely rugulose; scutellum laterally narrowed, the apical spinous angles a little directed inwardly; legs slender, anterior femora moderately incrassated, unarmed, anterior tibiæ provided with a short apical spongy furrow; posterior tarsi with the third joint longest; rostrum with the basal joint about as long as remaining joints together

A Neither antennæ nor tibiæ annulated

1182. Scadra fuscicrus, Stâl, Öfv Vet-Ak Forh 1859, p 183.

Rufous-testaceous, antennæ, a large spot on interior area of corium, membrane, three segmental spots to the ventral segments (one medial and one near each lateral margin), and the tibiæ black or piceous; tarsi ochraceous, apical joint fuscous.

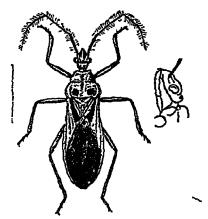


Fig 201 -Scadra fuscionus

Var a Posterior lobe of pronotum with two piceous spots.

Var. b. Resembling var. a, but without the central series of ventral spots

Length 10½ to 13½ millim Hab. Ceylon (Green, Brit. Mus.) Burma; Bhamo (Fea). SCADRA. 309

1183 Scadra relata, Dist. Ann Soc Ent Belg. 1903, p 62.

Reddish-ochraceous; disk of scutellum, corium (excluding apex and lateral margins), membrane, and lateral areas of meso- and metasterna piceous or black; second joint of antennæ a little longer than the first, remainder mutilated, anterior lobe of pronotum much shorter than posterior lobe, which has the three sulcations very distinctly granulate; abdomen distinctly widened from a little beyond base and then narrowed to apex, posterior femora slightly incrassate at apex, tarsi ochraceous

Length 10 millim.

Hab Burma; Karennee Arakan.

1184. Scadra tibialis, sp n

Reddish-testaceous; eyes, antennæ, corium, and apical halves of tibiæ fuscous, disk of posterior lobe of pronotum pale fuscous; basal disk of scutellum, membrane, a lateral segmental series of spots and anal segment of abdomen black; sternum castaneous; lateral and posterior margins of corium and connexivum ochraceous, antennæ longly pilose, base of first joint red, impressions to posterior lobe of pronotum rugose

Length 11 millim

Hab Assam; Sadiya, Margherita (Coll Dist).

B. Antennæ not, but tibiæ annulated.

1185. Scadra scutellaris, sp n

Luteous, apex, disk beneath and collar of head, antennæ, basal joint of rostrum, scutellum, sternum and legs black; abdomen beneath reddish-ochraceous, with a broad black sublateral margin which does not reach apex; posterior margin of prosternum luteous, connexivum above and beneath luteous, its extreme margin ochraceous; membrane pale fuscous, its apical margin ochraceous; tibiæ with a subbasal luteous annulation; body broad, robust, impressions to posterior pronotal lobe transversely rugose.

Length 10 millim.

Hab Assam, Khásı Hılls (Chennell).

C Tibiæ not, but antennæ annulated.

1186 Scadra annulicornis, Reut Act Soc Sc Fenn x11, p 309 (1881)

Black, glabrous, posterior lobe of pronotum, the whole of corium and dorsal surface of abdomen, connexivum above and beneath coral-red, third joint of antennæ with a pale flavescent basal annulation

Reuter describes this species as allied to S. fuscious, Stål, but besides the different coloration, the stature is more robust, the posterior pronotal lobe more strongly rugose, and the impressions distinctly carinulate.

Length, J, 11 millim.

Hab. Coylon (Nietner, Berlin Mus)

A mutilated specimen from Ceylon is also contained in the British Museum.

1187. Scadra maculiventris, Stål, Ann Soc Lint Fi 1863, p 46.

Coral-red; antennæ, base of scutellum, corium (excepting lateral margin dilated at base and apex), meso- and metasterna, three ventral segmental series of spots (one central and one near each lateral margin, the last united on apical segment), and the legs black; pronotum with two spots on anterior and two larger spots on posterior lobe olivaceous-black; third joint of antennæ with a pale greyish basal annulation, coxæ and trochanters coral-red; extreme margin of connexivum luteous.

Length 11 millim.

Hab. " North India" (Brit Mus).

D. Both antenna and tibic annulated.

1188. Scadra cincticornis, Kn by, J Lian Soc, Zool xxiv, p 110 (1891)

Sanguineous, corium dull reddish-testaceous; connexium reddish-piceous, antennæ, two spots on posterior lobe of the pronotum, a large obtuse-triangular spot on inner angle of corium, membrane, three longitudinal series of large spots to abdomen beneath (one central, the other two lateral), tibiæ and last joint of tarsi black; a subbasal annulation to second and third joints of antennæ and a subapical annulation to posterior tibiæ luteous, longitudinal impressions to posterior lobe of pronotum strongly rugulose.

Length 122 to 13 millim.

Hab. Ceylon (Green & Lewis) Burma; Kalennee (Fea)

1189. Scadra annulipes, Reut. Act. Soc Sc. Fenn xu, p 309 (1881)

Dull flavous-testaceous, antennæ, a spot on each side of posterior pronotal lobe, a triangular spot on interior area of corium, membrane, abdomen above, last ventral segment and a lateral ventral series of 10 und spots, three annulations to tibize (basal, medial, and apical), and apices of tarsi black or piceous; third joint of antennæ with a subapical white annulation, scutellium wholly testaceous, connexivum not spotted

Length 131 millim

Hab Calcutta (Stockholm Mus).

Genus QUERCETANUS, nov.

Type, Q. atromaculatus, Dist.

Distribution Oriental Region

Head robust, anteriorly narrowed behind, eyes also compressed,

collar short, ante- and postocular areas subequal in length; first joint of antennæ shorter than head but passing its apex, second joint considerably longer than first; rostrum with the first and second joints subequal in length, or second slightly shortest; pronotum with the anterior lobe considerably narrower than the posterior, shorter in length, moderately wrinkled, centrally longitudinally incised, posterior lobe with three longitudinal incisions, one central and one on each lateral area, the lateral margins nodulose; scutellum transverse, not prominently narrowed, apical spinous angles wide apart, connexivum moderately prominent; membrane reaching or slightly passing the abdominal apex, anterior femora very slightly thickened; anterior and intermediate tibue with a short apical furrow.

1190. Quercetanus atromaculatus, sp 11

Dull sanguineous; central incision to anterior lobe and

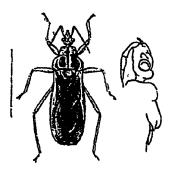


Fig 202.—Quercetanus alsomaculatus

two large discal spots to posterior lobe of pronotum, corium (excepting base and lateral margins), membrane, a linear spot near anterior coxe and a similar spot behind them, a spot behind intermediate coxe, the abdominal stigmata, and spots to connexivum black; abdomen reddish - piceous, beneath antennæ with the and second joints fuscous (remaining joints mutilated in

specimen described), base of first joint red.

Length 16 millim.

Hab. Western Indian Province (Atkinson, Brit. Mus.)

1191. Quercetanus relatus, sp n

Dull sanguineous; corium (excepting base), lateral margin and apical angle, membrane, a tibial annulation near base, a very obsolete annulation near apices of intermediate and posterior femora, and a central spot to scutellium black, first and second joints of antennæ black, (remaining joints mutilated in specimen described); connexivum unicolorous, unspotted.

Length 16 millim.

Hab. Ceylon (Brit Mus.).

Genus MENDIS.

Mendis, Still, Ofi. Vet-Al Forh 1859, pp 175 & 180. id In Hem 1v, p 46 (1874)

Type, M semirufus, Stal, a Malayan species Distribution Oriental Region and China

Head oval, behind eyes distinctly narrowed, collar short, antennæ seven-jointed, first joint about as long as head and passing its apex; rostrum with the first and second joints subequal in length, pronotum transversely constricted before middle, and longitudinally impressed centrally and on each posterior lateral area; scutellum a little narrowed posteriorly, subtransverse, apical spinous angles situate widely apart; hemelytra about equal in length to abdomen; metasternum with four carinæ, ventral incisures rugose; legs slender, anterior femora slightly incrassated and unarmed, anterior tibiæ provided with a short apical spongy furrow.

1192. Mendis bicolor, Dist Ann Soc Ent Bely 1903, p 62



Fig 203 -Mendis bicolor

Sanguineous; antennæ, apical maigins of head, eyes, ocelli, hemelytra, apical margin of abdomen above, meso- and metasterna, legs and apex of abdomen black; body elongate, slender, hemelytra not quite reaching apex of abdomen, tarsi ochraceous, abdominal incisures transversely rugose.

Length 11 millim

Hab. Ceylon, Peradeniya (Green)

1193. Mendis nigripennis, Fab. (Reduvius) Ent. Syst. iv, p. 196 (1794), id. Syst. Rhynq. p. 269 (1803), Stål, Hem. Fab. 1, p. 117 (1868)

Mendis sanguinaria, Stål, Öft. Vet-Ak. Foi. h. 1866, p. 301

Coral-red, shining, hemelytra opaquely, lateral spots to promeso- and metasterna, apex of abdomen, and apices of tibue black, exterior margin of corium (its apex dilated) coral-red, shining; lateral margins of corium dilated at apices, apical margins of the segments to upper surface of abdomen, subtriangular marginal spots, vitta anteriorly narrowed and interrupted at incisures, and sixth abdominal segment coral-red, connexivum at apices of segments narrowly fasciated with black, antennæ black, basal joint coral-red, its apex fuscous, tarsi fuscous.

Length 13 to 15½ millim.

Hab. "India orientalis" (fide Stal).

I have not seen this species

Genus LIBAVIUS, gen. nov.

Type, L green, Dist. Distribution. Ceylon.

Head broad, narrowed behind eyes, which are very prominent, antennæ longly pilose, apparently seven-jointed; first joint much longer than head, about as long as pronotum, first and second joints subequal in length; rostrum with the first and second joints subequal in length. Pronotum with the anterior lobe much shorter and narrower than the posterior lobe, tumid, sculptured, profoundly centrally sulcate; posterior lobe with three broad and deep longitudinal impressions, one central and one on each lateral area Scutellum transverse, scarcely narrowed behind, the apical spinous angles situate wide apart; abdomen slightly dilated, the posterior



Fig 204 -Libanus greens

segmental angles to the connexivum tuberculous; anterior femora moderately incrassated, anterior tibiæ with a short apical spongy furrow.

1194. Libavius greeni, sp n

Reddish-ochraceous; head, anterior lobe of pronotum, and body beneath brownish-ochraceous, corium luteous; membrane black, its basal margin luteous; antennæ luteous, longly pilose, first and second joints subequal in length;

veins and apical angle to corium tinged with reddish.

Length 12 millim
Hab Ceylon (Green).

Genus LABIDOCORIS.

Labidocoris, Mayr, Verh z.-b Ges Wien, xv, p. 440 (1865), Stal, En Hem iv, p 46 (1874)

Type, L. elegans, Mayr.

Distribution India, China, and Japan.

Head short, broad, central lobe between antennæ compressed and elevated; antennæ seven-jointed, first joint longer than head; rostrum with the first and second joints subequal in length, pronotum with the anterior lobe protoundly sulcated and with two minute tubercles; scutellum slightly narrowed posteriorly, apical spines wide apart, segmental incisures strongly rugose, anterior femora strongly spined beneath near apex; intermediate and posterior femora obsoletely tuberculous near apex, anterior tibiæ with a minute subobsolete apical spongy furrow

1195. Labidocoris elegans, May, Verh z-b. Ges Wien, xv, p 440 (1865), Stal, En Hem iv, p 52 (1874), Reut Act Soc Sc Fenn xii, p 304 (1881)

"Sanguineous, antennæ and hemelytra black, opaque, base, lateral margin, and apex of corium sanguineous; antennæ longly pilose."

Length 91 millim.

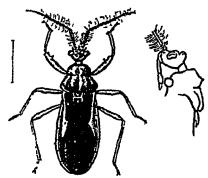


Fig. 205 - Labidocoris elegans

Hab Tranquebar (fide Reuter).

Dr. Mayr's typical specimen was without locality, and has been kindly lent to me for figuring by Dr. Handlirsch, of the Vienna Museum. Reuter was able to determine the occurrence of this species at "Tranquebar," and thus authenticate its presence in this fauna.

Genus ECTRYCHOTES.

Ectrychotes, Burm. (part) Handb. 11, p 237 (1835), Stal, En. Hem. 1v, p 46 (1874)

Loricerus, Hahn (part), Wanz Ins 1, pl v (1831) Larymna, Stål, Ofv Vet-Ak Fork. 1859, pp 176 & 183.

Type, E pilicornis, Fabr.

Distribution Oriental Region, China and Japan.

The principal distinguishing character of this genus may be found in the scutellum, which possesses a small intermediate apical spinous angulation, pronotum with a strong central sulcation continued from the anterior lobe to the disk of the posterior lobe; the four anterior dorsal segments of the abdomen are laterally at base and apex, and the fifth at base, transversely impressed; ventral incisures strongly carinulate; antennæ with eight joints.

A. Pronotum not unicolorous.

a Anterior and posterior pronotal lobes differently coloured

1196. Ectrychotes pilicorms, Fabr (Reduvius) Mant 11, p 311 (1787), Mayr (Larymna), Reise Novara, Hem p. 156 (1866), Stål (Larymna), Hem Fabr. 1, p 118 (1868).

Coral-red; head, anterior lobe of pronotum, sternum, legs,

transverse fasciæ (not reaching lateral margins) to fourth and fifth ventral segments, and the sixth and anal segments bright bluish-black; antennæ, about apical half of clavus, interior area of corium, membrane, and a spot on last dorsal abdominal segment black; coxæ, trochanters, bases of anterior and intermediate femora, and nearly basal half of posterior femora and the tarsi coral-red, apices of tarsi black

Leugth 12 to 13 millim

Hab. "Tranquebar" (Copenhagen Museum)

A specimen without locality is also contained in the British Museum.

b. Later al areas of posterior pronotal lobe palely coloured

1197. Ectrychotes dispar, Reut Act Soc Sc Fenn Mil, p 304 (1881)

Shining violaceous, antennæ and hemelytra piccous; lateral

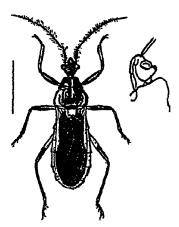


Fig 206 -Ecti ychotes dispar

areas of the posterior lobe of pronotum, scutellum (entirely or sometimes excepting base), base of clavas and corium, lateral margins of corium (broadening at apical angles), connexivum, apices of coxe, trochanters, basal half of posterior femora, bases of tarsi, and abdomen coral-red, apex of abdomen beneath, and sometimes segmental sutural fascie, violaceous

Length 12 to 14 millim

Hab. Calcutta (Stockholm Mus).
Bombay (Letth) Bangalore
(Cameron)

The coral-red coloration in some specimens shows signs of fading

into ochraceous. From Reuter's description, he seems to have examined faded specimens.

1198. Ectrychotes rufescens, Dist Ann Soc Ent Belg 1903, p. 63

Head, pronotum, scutellum and sternum olivaceous-black, shining, lateral margins of posterior lobe of pronotum, basal angle of corium, body and legs sanguineous, hemelytra, spots to connexivum (on fourth and fifth segments in male, on third, fourth and fifth segments and apex in female), large lateral spots to third, fourth and fifth segments, the disk of sixth segment and the anal segment to abdomen beneath, central annulations to intermediate and posterior tibiæ black, extreme base of antennæ ochraceous, central sulcation to pronotum broad and foveate.

Length 10 to 12 millim.

Hab Burma; Bhamo, Teinzo (Fea)

Allied to E dispar, Reut

1199. Ectrychotes cupreus, Rent. Act. Soc Sc Fenn x11, p 303 (1881)

Cupreous, shining: lateral margins of posterior lobe of pronotum, narrow bases of clavus and corium, lateral margin of corium nearly to middle, apex of corium, some basal suffusion to membrane, and connexivum ochraceous, 'the last with apical halves of segments 3-5 black, dorsal surface of abdomen coralred, the two apical segments black; abdomen beneath dark ochraceous, basal margin and segmental sutural fasciæ (widened laterally) shining cupreous, tarsi testaceous; corium black, apex and membrane dark fuliginous

Var. Red, head, pronotum, first joint of antenna, rostrum, scutellum, sternum and legs shining cupreous, connexivum with

the fourth and fifth segments apically black.

Length 10 to 10g millim.

Hab Bengal (Copenhagen Mus.) - Java; Bantam.

Reuter states that his variety is found in Bengal, and the typical form in Java.

1200. Ectrychotes scutellaris, Bredd (Ectrichodia) Zool Anz xxvi, p 512 (1903)

Head, pronotum and sternum shining coppery green, basai joint (sometimes the whole) of antennæ, lateral margins of posterior lobe of pronotum, scutellum, corium, connexivum, abdomen beneath, rostrum and legs luteous, corium with a large chocolate-brown spot occupying the whole of disk and clavus (excepting base, lateral margin and apex), the apex and membrane dark fuliginous; spots to connexivum above and beneath, segmental sutures, sublateral areas and anal segment to abdomen beneath, about apical balves (sometimes nearly whole) of femora, bases and apices of tibie, and the tarsi coppery brown or green.

Length 9 to 11 millim.

Hab Sikhim (Brit. Mus). Assam; Margherita (Coll Dist), Khási Hills (fide Breddin)

B. Pronotum unicolorous.

a Pronotum blacknsh or violaceous

1201 Ectrychotes crudelis, Fabr (Reduvius) Syst Rhyng p 269 (1803), Mayr (Larymna), Reise Novara, Hem p 157 (1860), Stål (Larymna), Hem Fabr 1, p 118 (1868).

Brassy or violaceous black, antennæ and hemelytra black, opaque, base of comum and clavus, abdomen beneath, trochanters, bases of anterior and intermediate femora, basal third of posterior femora, and connexivum coral-red, dorsal disks of last two abdominal

segments black; abdomen beneath with the sixth and anal segments and generally with incisural segmental fascise violaceous-black. In some specimens the connexivum is ochraceous, not coral-red

Length 11 to 12 millim.

Hab. Tranquebar. Burma; Rangoon, Palon, Bhamo, Toungoo (Fea) —Malay Peninsula; Perak (Coll. Dist.).

1202. Ectrychotes abbreviatus, Reut. Act Soc Sc Fenn XII, p 303 (1881)

Head, pronotum, and scutellum brassy-black: antennæ and rostrum black; sternum and legs violaceous-black; trochanters and bases of femora coral-red; anterior femora with an anterior vitta near apex, and the anterior tibiæ anteriorly and beyond middle, dull ochraceous, hemelytra black, opaque; base of clavus and corium, lateral margins of corium either wholly or abbreviated, coral-red; abdomen coral-red, the last two dorsal segments black and densely punctate, opaque; connexivum coral-red; abdomen beneath with the apex, lateral segmental areas, and sometimes with segmental sutural fasciæ violaceous-black. In the female the hemelytra are abbreviated and do not pass the penultimate segment

Length 10 to $11\frac{1}{2}$ millim. Hab Calcutta (Coll. Dist.).

b Pronotum coral-red.

1203. Ectrychotes atripennis, Stål (Larymna), Öfv Vet-Ak Forh.
1866, p 302, Dist A M N H (7) x, p 291 (1902)
Ectrichodia ophirica, Wall. Cat Het viii, p 51 (1873)
Scadra ophirica, Leth & Sev Cat Gén Hém t iii, p 133 (1896)
Ectrychotes atripennis, var, Dist A. M N H (5) xi, p 170 (1883)

Coral-red, shining; antennæ becoming fuscous towards apex, in some varieties fuscous with the base alone red; hemelytra (excluding base and a marginal line from base to middle), three large lateral segmental spots to sternum, and a lateral fascia to abdomen beneath (neither reaching base nor apex) black. In one variety examined the segmental sutures and anal segment are also black

Length 11 to 12 millim.

Hab. Mergui (Anderson) Tenasserim (Coll Dist) — Malacca, Borneo (Brit Mus).

1204. Ectrychotes comottoi, Leth. Ann Mus Cw Gen xvni, p. 649 (1883)

Coral-red; antennæ (excluding basal joint), the whole inner area of corium (excluding base, lateral margin, and apex), membrane, meso- and metasterna, central transverse segmental fasciæ in 3, and incisural segmental fasciæ in 2 black. In the 2 the apical and anal segments are black and the hemelytra do not reach the apex of the abdomen.

Length 12 to 13 millim.

Hab Burma; Minhla (Comotto), Karen Hills (Dohcrty), Karennee (Fea). Mergui (Coll Dist.)

1205 Ectrychotes nigripes, Leth Ann Soc Ent Belg xxxx, Bull p cxliv (1891)

Coral-red, slinning, head beneath, lostrum, antennæ, base and disk of scutellum, sternum, clavus, membrane, longitudinal fascia on each side of abdomen extending beyond middle, and the legs black; connexisum coral-red

Length 11 millim

Hab. Bengal; Tetara (fide Lethierry).

I have not seen this species.

Genus PHYSORHYNCHUS.

Physothynchus, Amy & Serv Hém p 342 (1843), Stâl, En Hem iv, p 46 (1874)
Loricerus, Hahn, Wanz Ins 1, pl v, f 20 A-E (1831)
Glymmatophora, Stâl, Öfv Vet-Al Ford 1853, p 261
Ectrichodia, Stâl, Hem Afr in, pp. 101 & 103 (1865)
Subg Hæmatorrhophus and Glymmatophora, Stâl, En Hem iv, pp 49, 50 (1874)

Type, P crux, Thunb, an Ethiopian species Distribution. Ethiopian and Oriental Regions.

Body oblong, ovate, head ovate, deflected, collar short; rostium incrassate, flist and second joints subequal in length, second joint turnid; antennæ six-jointed, in the males long, in the females shorter and much less pilose, first joint about equal in length to head; pronotum transversely constricted, longitudinally impressed centrally and on each lateral area; scutellum with the apex broad, tiuncate, and bispinously angulated, anterior femora somewhat strongly incrassated, and spinous or tuberculous beneath; anterior tibiæ provided with an apical spongy furrow, abdominal spiracles elongate

Some of the species included in this genus, which have the abdomen beneath centrally impressed, may really belong to undescribed genera; but as I possess only female specimens, I prefer to

abstain from founding new genera on such material

A Hemelytra in male fully developed

- a Posterior pronotal lobe broader than anterior.
 - a Pronotal lobes in male equally long.
- 1206 Physorhynchus marginatus, Reut Act Soc Sc Fenn XII, p. 301 (1881), Dist A M N H. (7) x, p 292 (1902) Ectrichodia discrepans, Wall. (part.) Cat Het viii, p 46 (1873)
- 6. Violaceous-black, hemelytra black, opaque, base and lateral margins of corium violaceous-black; last two joints of rostrum and

extreme posterior margins of pro- and mesosterna fuscous, lateral margins of connexivum and principal part of the dorsal surface of

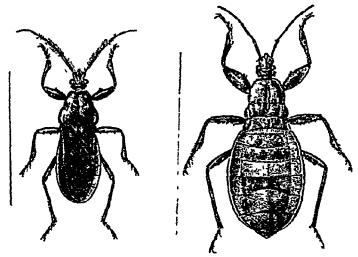


Fig 207 -Physor hynchus marginatus, & & Q

abdomen sanguineous, the incisures black; abdomen beneath with the disks of the third, fourth, and fifth segments sanguineous

Var. The whole of the connexium (excluding incisures) sanguineous.

2. Apterous; dorsal surface of abdomen violaceous-black.

lateral margins of the connexivum sanguineous.

Antennæ with the second joint a little longer than the first; in the male the pronotal lobes of about equal length, in the female the anterior lobe much the longest, dorsal surface of abdomen irregularly transversely rugose

Length, 3, 26 to 30, 2 30 to 40 millim

Hab. Bengal (fide Reuter) Assam; N. Khási Hills (Chennell) Margherita (Doherty) Burma (Coll Dist.) Karennee (Fea)

- b Anterior pronotal lobe in male longer than posterior lobe.
- 1207. Physorhynchus linnæl, Stål (Ectrichodia), Öfv Vet -Ak Forh
 1859, p 178, id (Hæmatorrhophus) En. Hem it, p 49 (1874);
 Reut Act Soc Sc Fenn xu, p 300 (1881); Dist A M N. H
 (7) x, p 292 (1902)
 Ectrichodia discrepans. Walk (part) Cat Het vui, p 46 (1873)
- d Violaceous-black, hemelytra black, opaque; base and lateral margins of corium violaceous-black; abdomen sanguineous, the anal segment violaceous-black; apices of tarsi and the tibiæ clothed with long ochraceous hairs; antennæ black, longly pilose, apical joints fuscous, second joint longer than the first, connexivum

dull testaceous; anterior pronotal lobe a little longer than the posterior; abdomen above transversely rugose

Length, 3, 23 to 24 millim.

Hab Ceylon; Peradeniya (Green).

I have not seen the female of this species

- B Hemelytra in both sexes abbieviated or practically absent.
- b Pronotal lobes about equal in breadth, anterior lobe longer than posterior in both sexes.
 - a. Second joint of antennæ longer than first.

1208 Physorhynchus pedestris, sp n

Brilliant shining violaceous-black; antennæ, rostrum, coxæ, trochanters, and legs brilliant shining pui plish-brown, second joint of antennæ longer than first; anterior lobe of pronotum longer than the posterior in both sexes, lobes about equally broad and both traversed by a central longitudinal linear incision, abdomen above transversely rugose, almost lævigate on central longitudinal disk; anterior femora strongly incrassated and with a strong tubercle beneath near base, hemelytra very rudimentary, or practically absent, in both sexes

Length, & and Q, 22 millim Hab. Utakamand (Coll Dist).

- b. First and second joints of antenna subequal in length.
- 1209 Physorhynchus nigroviolaceus, Reut Act Soc Sc Fenn XII, p 302 (1881)
- of & Q. Brilliant shining violaceous-black; antennæ (excepting first joint) black, opaque; last two joints of rostrum, tibiæ above, and tarsi brownish-piceous; hemelytra very radimentary in male, practically absent in female, at tennæ in male obsoletely pilose (fide Reuter), first and second joints equally long, abdomen above irregularly transversely rugose, legs concolorous.*

Length, & 23 millim. (fide Reuter), Q 23 to 29 millim Hab. Utakamand (Indian Mus) Bangalore (Coll Dist.)

- 1210. Physorhynchus tuberculatus, Stål (Hæmatorrhophus), En Hem 1v, p 49 (1874), Reut Act Soc Sc Fenn xu, p 300 (1881)
 - d. Violaceous-black, somewhat shining; lateral margins of

^{*} Kirkaldy (J Bomb N H Soc xiv, p 300, 1902) has described a species from "India" under the name of Ectrichodia horienda. The types are stated to be in "Colls Edwards & Kirkaldy." Mr Edwards tells me he knows nothing of it, and its describer has taken his types with him to the Sandwich Islands. It seems to be near this or the preceding species, and I have not ventured to include it.

connexivum usually but not always sangumeous, abdomen unicolorous, hemelytra abbreviated, practically absent; apices of tibiæ and the tarsi clothed with long ochraceous hairs, pronotum with the anterior lobe longer than the posterior, the lobes about equally broad; first and second joints of antennæ subequal in length.

Q. Resembling male in coloration; apterous

Length, & 30, \(\text{2 28 to 35 millim.} \)

Hab. Assam, Nága Hills, Khási Hills (Chennell) Ceylon;

Peradeniya (Green) Burma, Bhamo (Fea)

- C Female alone known. Hemelytra practically absent.
- a. First four ventral segments centrally longitudinally impressed.

a. Body elongate

1211. Physorhynchus malabaricus, sp. n

2. Head, pronotum, legs, and body beneath black; abdomen above purplish-brown, opaque, coarsely rugose; abdomen beneath with the disks of the third, fourth, and fifth segments dull sanguineous, antennæ reddish-brown, somewhat obsoletely or very sparingly pilose, first and second joints subequal in length, anterior lobe of pronotum much longer than posterior, both lobes about equally broad; apices of the scutellum very tuberculously spinous and directed obliquely upwards; anterior femora strongly incrassated, with an ill-defined tubercle at about centre of under surface first four ventral segments centrally longitudinally impressed.

Length, Q, 26½ millim. Hab Malabar (Coll Dist.).

b Body short, broad.

1212. Physorhynchus talpus, sp n

2. Black, opaque, thickly, finely, greyishly sericeous; antennæ with the first and second joints black, subequal in length, remaining joints fuscous; anterior lobe of pronotum strongly tumidly convex, with a central longitudinal linear impression, very much longer than anterior lobe; hemelytra practically absent; abdomen short, broad, tumid beneath, moderately flat above, the spiracles and a discal central transverse spot at the junction of the fourth and fifth segments piceous, tibiæ beneath at apices, and the under surface of tarsi, ochraceously pilose; abdomen above with the first and second segments rugose, remaining segments thickly, finely rugulose; abdomen beneath with the first four segments centrally longitudinally impressed

Length, 2, 22 millim. Hab. Cachar (Coll. Dist.).

b. Ventral segments not medially impressed.

1213. Physorhynchus insignis, sp n.

Q. Shining dark bronzy olivaceous-brown; lateral angles of posterior pronotal lobe, apex and apical spines of scutellum, dorsal segmental incisures, lateral segmental rounded spots to connexivum, rostrum, coxæ, trochanters, bases and apices of femora, the tibiæ and tarsi, central discal transverse segmental fasciæ, lateral spots and lateral marginal spots to abdomen beneath luteous; antennæ and anterior legs mutilated in specimen described; anterior pronotal lobe moderately tumid, posteriorly discally foveate, lateral margins rounded and about twice the length of posterior lobe, abdomen above sparingly rugulose; connexivum with the basal angles of the segments a little nodulose. Abdomen beneath not centrally impressed

Length, ♀, 13 mıllim Hab Nága Hılls (Chennell)

1214. Physorhynchus 1 ubromaculatus, sp. n.

Q. Head, antenne, rostrum, legs, and sternum black; abdomen beneath shining violaceous-black, above somewhat dull violaceous-black; lateral margins of connexivum above and beneath, two central spots on each abdominal segment, of which the hasal are smallest and the apical largest, and the last segment of the abdomen (excluding base) reddish-testaceous, antenne with the second joint slightly longer than the first; pronotum with the anterior lobe much longer than the posterior, but about equal in breadth, its lateral margins rounded, its disk finely centrally impressed, posterior lobe obscurely transversely striate, centrally finely impressed and foveate near each lateral angle; hemelytra practically absent, abdomen broad, margins rounded, above rugose, excepting extreme central disk which is very finely and obscurely transversely striate beneath, not centrally impressed

Length, 2, 28 milhm Hab Nilgurs (Brit Mus).

Genus STEGIUS, nov.

Type, S pravus, Dist Distribution Bengal.

Q Broadly subovate, head broad, anteocular much longer than postocular area, in front of eyes obliquely descending on each side from a somewhat broad central carination, behind eyes transversely incised, first joint of antennæ about as long as head, incrassated, a little curved apically, smooth, the remaining joints pilose, second longer than first, rostrum short, much incrassated first joint a little shorter than second, which is inwardly angularly dilated near its base; pronotum much longer than head, moderately turnid, its lateral margins convexly narrowed anteriorly, centrally

longitudinally impressed on disk and transversely impressed near base, hemelytra rudimentary, reaching the base of the second abdominal segment; abdomen convexly broadened from base, above with the fifth and sixth segments longest, fourth with a central triangular impression, beneath with the first four segments centrally divided, prosternum with a narrow, central, linear sulcation; inesosternum with a very broad central sulcation; femora incrassated, anterior temora with a basal carination beneath terminating in a distinct dentation, intermediate femora with a long, apical, spongy furrow beneath

1215 Stegius pravus, sp n

Q. Black, moderately shining; apices of the tibiæ heneath and the tarsi longly ochraceously pilose, antennæ with the first and second joints robust and subequal in length; head with the lateral areas in front of eyes finely granulate, transversely impressed behind eyes, the impression a little curved, pronotum with the anterior lobe turnid its lateral and anterior margins

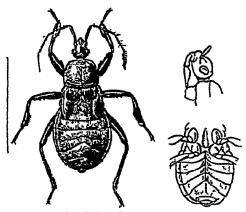


Fig 208 -Steques pravus

carnately reflexed, with a discal central impression, and much longer than posterior lobe; hemelytra rudimentary and reaching the second abdominal segment, central disk of fourth abdominal segment above with a subtriangular process; mesosternum with a broad, central, transversely striate furrow, first four ventral segments beneath medially divided, fifth centrally impressed

Length 23 millim

Hab. Bengal Jaipangori

Genus ERIXIMACHUS, nov

Type, E globosus, Dist Distribution Southern Lindia

Q. Broadly suborate, abdomen globose, head very broad, vor m

anteocular very much longer than postocular area, before eyes somewhat obliquely depressed on each side, vertex tumid, antenua with the first joint subequal in length to head, but longly passing its apex, second joint longer than first; rostrum short, very thick, second joint thicker and slightly longer than first: pronotum transversely impressed near base, tumid, its lateral margins contex, and with a central discal linear longitudinal impression; abdomen above levigate not rugose, convexly turned but prominently depressed at base, fifth and sixth segments longest, beneath globose with the first four segments medially faintly longitudinally impressed, prosternum medially longitudinally sulcate; mesosternum not sulcated, but with an obscure, medial, ovate, transversely rugulose impression, anterior and intermediate femora strongly incrassate. intermediate femora with two prominent dentate tubercles beneath, anterior and intermediate tibic each with a somewhat long spongy furrow beneath.

1216. Eriximachus globosus, sp n.

2. Head, pronotum, prosternum, legs, antennæ, and rostrum

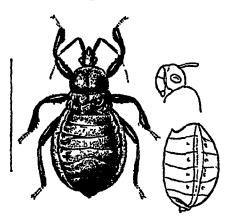


Fig. 209 — Eriximachus globosus

piceous-black, opaque; abdomen above brownish-piceous; connexivum, abdomen beneath, meso- and metasterna, and apices of the tibiæ beneath brownish - testaceous, and second roints of antenna almost equal in length, anterior lobe of pronotum globose, its disk centrally, longitudinally, linearly impressed, much longer than posterior lobe: abdomen tumid above, globose beneath, above levigate, not rugose; hemelytra practically absent.

Var. Central area of

anterior and intermediate tibiæ pale castaneous

Length, 2, 22 to 26 millim.

Hab. Utakamand (Indian Mus). Calcutta (Coll. Dist)

Genus VILIUS.

Vilius, Stål, Ann Soc. Ent. Fr. 1863, p. 45; En. Hem. iv, p 45 (1874)

Type, V. melanopterus, Stal. Distribution Oriental Region

Head large, broad, the region of the ocelli tumidly elevated, eyes very prominent in male, less so in female; antennæ four-jointed,

vilius. 325

pilose in male, scarcely so in female, first joint in male longer than head, second joint a little longer than first; rostrum with the second joint much longer than first; pronotum constricted before middle, posteriorly longitudinally impressed centrally and on each lateral area; scutellum transverse, apex broadly truncate, apically armed on each side with a curved spinous angulation; legs slender, anterior femora very slightly incrassate, anterior tibiæ each provided with a minute apical spongy furrow.

1217. Vilius melanopterus, Stâl, Ann Soc Ent F. 1863 p 45.

Dist A M N. H (7) x, p 292 (1902).

Ectrichodia insignis, Walk Cat Het viii, p 48 (1873), Leth

§ Sev (Mendis) Cat Gén Hém. t iii, p 137 (1896)

Ectrichodia limbifera, Walk loc cit p. 49

d. Coral-red or reddish-testaceous, antennæ (excluding apical

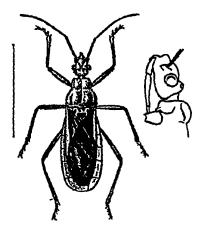


Fig. 210 - Vilius melanopterus, Q

joint), hemelytra, apices of femora and bases of tibine fuscous; base and lateral margin of corium testaceous, antennæ with the first and second joints longly ochraceously pilose; eyes large, strongly exserted; posterior lobe of pronotum with three longitudinal impressions (one central and one on each lateral area), the impressions transversely rugose.

2. Eyes subpromment; antennæ not pilose, legs usually almost wholly fuscous.

Length 17 to 22 millim.

Hab. Assam; Sylhet (Brit Mus), Khási Hills (Chennell)

Burma, Bhamo, Tharawaddy (Fea) Tenasserim, Meetan, Thagata (Fea) —Malay Peninsula; Perak (Coll. Dist.)

1218. Vilius nigriventris, Dist. Ann. Soc Ent. Belg 1903, p 63

Sanguineous; antennæ, hemelytra, and small spots to connext um at incisures bluck; a spot at anterior coxæ, meso- and metasterna, and abdomen beneath indigo-black, shining; central discal and lateral marginal spots to abdomen, sixth abdominal segment and abdominal apex, basal angles, lateral margins, and broad apex to corrum sanguineous; apices of tibiæ and tarsi black.

Length 15 millim.

Hab. Ceylon, Puttalam (Green)

Subfamily X APIOMERINÆ.

Apiomerina, Stal, En. Hem 1v, p 3 (1874)

In this subfamily, represented by only three * genera in this fauna, the main characters are those more fully given for the following subfamily (Harpactorine), from which the Apiomerine may be always separated by the constant character of the rostrum, which has the first joint very short and the second much elongated.

The Apiomerina are principally Neotropical insects, a few being

found in the Oriental and Ethiopian Regions.

Synopsis of Genera

A First joint of antennio longest, longer than head, anterior angles of pronotum moderately prominent.

B First joint of antennæ shorter than head, second joint longest

a Anterior angles of pronotum longly spinous, basal margin of pronotum posteriorly produced

b Antenio angles of pronotum not spinously produced, basal margin of pronotum subconcavely smuate before base of scutellum

ECTINODERUS, fp 326

AMULIUS, p 327.

Godefridus, [p 328

Genus ECTINODERUS.

Ectmoderus, Westw Proc Ent Soc 1843, p 74, td Tr. E S 1v, p 120 (1845), Stål, En Hem 1v, p 44 (1874) Pristhevarma, Amy & Serv Hém p 355 (1843).

Type, E. longimanus, Westw, a Malayan species.

Distribution Oriental Region.

Head robust, eves inserted before middle, strongly transversely impressed behind eyes, and thence constructed to base, antennæ with the basal joint longest, second joint longer than third, both somewhat nodulose at base, pronotum very large, anteriorly dilated above the anterior coxe, the anterior angles acutely produced, transversely impressed before middle, posteriorly dilated and produced, its base emarginate, abdomen dilated on each side, legs long, anterior tibiæ longer than the temora and strongly setose on each side, anterior femora moderately incrassated. rostrum with the second joint very long, considerably longer than the first and third joints together.

1219. Ectinoderus bipunctatus, Amy & Serv (Pristhevarma) Hém. p 355, pl vi, fig 5 (1848).

Head, antennæ, rostrum, base of pronotum, and hemelytra piceous or black, bases of second, third, and fourth joints of

^{*} Godefridus is included, though somewhat aberrant

amulius 327

antennæ, pronotum (excluding base), and a discal spot to corrum

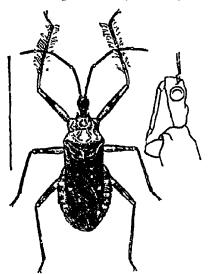


Fig 211 -Letinoderus bipunctatus

near ape luteous or brownishluteous, connexivum piceous, with dull reddish or luteous spots. body beneath, coxe, trochanters, and basal halves of temora dull sanguineous; a broad central annulation to anterior femora, apical halves of intermediate and posterior femora, and the tibie and tarsi black; apices of anterior tibie, and a subapical annulation to intermediate and posterior femora luteous

Var Corrum more or less spotted with luteous.

Length 27 to 35 millim

Hab Burma; Pegu (Coll.

Dist) —Sumatra, Java, Borneo.

1220 Ectinoderus exortivus, Dist Ann Soc Ent. Bely 1903, p 65

Head and antennæ black, the last with the bases of the second and third joints luteous, pronotum luteous, its posterior angular margins black, its basal margin brownish-ochraceous; hemelytra shining bluish-black; corium suffused with brownish-ochraceous, a pale luteous transverse spot on its apical margin, scutellum with the central carma brownish-ochraceous; connexivum black, shining, its aper and marginal spots luteous; body beneath and legs luteous, prosternum, acetabula, coxæ, trochanters, and basal twothirds of femora reddish-ochraceous or testaceous, disk of mesosternum, lateral margins of meso- and metasterna, a spot between intermediate and posterior coxe, apices of anterior tibie, posterior two-thirds of intermediate and posterior tibiæ and the tarsi fuscous or black, antennæ with the second joint almost as long as the third and fourth joints together; apical joint greyishly pubescent; anterior lobe of pronotum with a narrow central sulcation, posterior lobe with a deep, central, transverse impression between the lateral angles, behind which it is transversely striate, and between which and the anterior lobe there are five carinæ, two oblique on each lateral area, and one central which is subobsolete

Long., J., breadth between pronotal angles 7 millim Hab Burma, Pegu (Coll. Dist)

Genus AMULIUS.

Amulius, Stdl, Hem Afr 111, p 99 (1865), id En Hem 17, p 44 (1874)

Type, A. quadripunctatus, Stal, from the Malay Archipelago Distribution Oriental and Malayan Regions.

328 REDUVILDÆ

Head broad, robust, narrowed posteriorly, strongly transversely impressed behind eyes; antennæ with the second joint longest, first joint much shorter than head; rostrum with the second joint longest; pronotum with the anterior angles longly spinous, basal margin posteriorly produced and emarginate; legs long, anterior tibiæ as long as the femora or a little longer and longly setose, anterior femora incrassated.

1221. Amulius rubrifemur, Biedd Rev. Ent xviii, p 81 (1899).

Violaceous-black, anterior lobe of pronotum, sternum, and legs

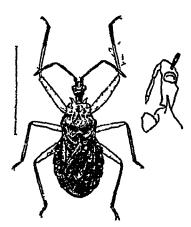


Fig 212 - Amuleus rubrefemus

sanguineous, apical halves of anterior tibiæ, the whole of intermediate and posterior tibiæ and the tarsi black; a small central basal spot to pronotum, apex of scutellium, two small spots on apical margin of corium, and spots to connexi um above and beneath pale ochraceous; antennæ with the second joint about as long as third and fourth joints together, first joint as long as anteocular portion of head; anterior pronotal angles long, spinous, outwardly curved.

Length 21 to 22 millim.

Hab Assam (fide Breddin).

Andaman Islands (Coll. Dist.).

Genus GODEFRIDUS, nov.

Type, G aluenus, Dist Distribution Burms

Broadly oblong; head long, about as long as pronotum at centre, anteocular portion a little more than twice the length of postocular portion, beneath transversely rugose and centrally, longitudinally, obscurely serrate; first joint of antennæ short, much shorter than head and not reaching its apex, second joint long, about as long as third and fourth joints together, rostrum long, slender, first joint very short, second very long, third a little longer than first; pronotum broadly transverse, very much broader than long, transversely impressed near spex, its base strongly subconcavely sinuate before base of scutellum, its lateral margins distinctly sinuate, scutellum large, a little tumid, transversely indented beyond middle, its apex a little produced; clavus very broad, hemelytra much wider than abdomen, their lateral margins flattened, convexly ampliated, and moderately reflexed, legs slender, anterior femora slightly incrassated, the tibiæ only finely pilose

1222 Godefridus alienus, sp n

Piceous; three transverse ochraceous spots on lateral areas of hemelytra (two on corium, the other and narrowest on membrane), antenna, rostrum, legs, and abdomen beneath castaneous; tarsi

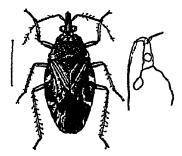


Fig 213 - Godefridus alienus

ochraceous, pronotum with the narrow anterior lobe shining, glabrous, the posterior lobe granulously subrugulose and minutely speckled with greyish; abdomen beneath somewhat piceous on lateral areas.

Length 9 to 10 millim.

Hab. Burma; Karennee (Fea).

Subfamily XI. HARPACTORINÆ.

Reduvina, Stål, En Hem. iv, p 3 (1874)

This is the largest subfamily of the Reduvidæ, and also its most typical representative. As already detailed in the synopsis of the subfamilies, it is to be recognized by the quadrangular areolet or cell situate near the interior angle of the corium and base of membrane. From the preceding subfamily (Apiomerinæ) it is to be distinguished by the rostrum, which is seldom very short and usually of moderate length, the area of the head between eyes is also distinctly transverse

Division RHAPHIDOSOMARIA.

Body very elongate, sometimes, as in Rhaphidosoma (the only genus here included), apterous; head elongate, eyes small; rostrum with the first joint very short, second joint very long, antenuæ inserted remotely from eyes

This division will include the following genera with which I am at present acquainted, viz .—Rhaphidosoma, found in the Ethiopian Region and India, and Leptodema and Lopodytes, both Ethiopian genera.

Genus RHAPHIDOSOMA.

Rhaphidosoma, Amy & Serv Hôm. p 392 (1843), Stâl, Hom Afr. 111, pp 54, 97 (1865), 1d En Hom 1v, p. 14 (1874)

Type, R majus, Germ, a South-Atrican species.

Distribution Ethiopian and Oriental Regions

Body linear, very elongate, apterous; head elongate, cylindrical, its apex shortly or obsoletely porrectly spined; eyes small, ocelli absent, rostrum slender, first and third joints short, the second about five times longer than the first, antennæ much shorter than the body, first joint a little, sometimes much, longer than the head, pronotum not extended above the mesonotum; scutellum neither elevated nor distinct, legs long, slender, the anterior legs inserted on disk of prosternum.

1223 Rhaphidosoma atkinsoni, Beigr Ent Month Mag 1893, p 63

Above obscure fuscous, with a narrow, lateral, pale ochraceous

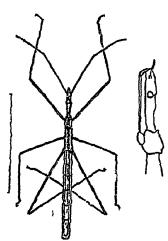


Fig 214 — Rhaphidosoma atkinsoni

fascia on each side extending from apex of pronotum to abdominal apex, interrupted at the bases of the abdominal segments. body beneath very pale ochraceous, abdomen with a fuscous central longitudinal line, which is obsolete on the two basal segments, first joint of antennæ about as long as from eyes to base of thorax; apex of head unarmed or very obsoletely spinous, distinctly moderately tumid behind eyes, distinctly tumid, a little shorter than mesonotum, and slightly longer than metanotum

Length 25 millim

Hab Tievandrum (Atkinson).
Cevlon (Green).

1224 Rhaphidosoma tuberculatum, sp n

Pale greyish, tibiæ and last two joints of antennæ pale ochraceous, a marginal series of small tubercles on each side of thorax above, a number of small discal tubercles to pronotum, black, two prominent tubercles at posterior margins of third, fourth, fifth, and sixth abdominal segments fuscous, apex of head distinctly porrectly spinous; first joint of antennæ about as long as from eyes to base of thorax; head very strongly impressed between eyes and distinctly tumid behind eyes, pronotum convexly tumid, its anterior angles spinously produced

Length 23 millim
Hab Baluchistan (Cleghorn)

Division HARPACTORARIA.

Body oblong or subelongate; head as long as pronotum or very little longer, anteocular and postocular areas almost subequal in length, scutellum not lobate, nor abdominal segments lobately dilated

Synopsis of Genera.

A First joint of antenne as long as head B First joint of antenne much longer than head, about as long as anterior femora

a Posterior lobe of pronotum neither longitudinally impressed nor elevated

b Posterior lobe of pronotum anteriorly longitudinally elevated

c Posterior lobe of pronotum longitudinally impressed **Горносернага**, р 331

HARPACTOR, p 332

BIASTICUS, p 337.

Sphrdanolestfs, p 339

Genus LOPHOCEPHALA

Lophocephala, Lap Ess Hem p 12 (1832), Amy & Seiv Hém p 385 (1843), Stål, Hem Afi 111, p 54 (1865), id En Hem 1v, p 14 (1874)

Type, L guerini, Lap.

Distribution. Oriental Region and Madagascar.

Head long, slender, a little longer than pronotum, antennæ inserted about midway between eyes and apex of head, first joint about as long as head and considerably passing its apex, rostrum slender, first joint short, second joint very long, about reaching anterior coxæ; pronotum with the anterior lobe short, sculptured, not centrally sulcated, posterior lobe with a longitudinal im-

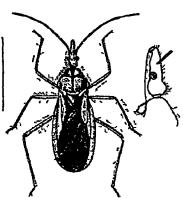


Fig 215 -- Lophocephala guerent

pression on anterior disk, the posterior angles a little posteriorly produced, scutellum subtrangular, the apex a little tuberculously produced; legs moderately slender

1225 Lophocephala guerini, Lap Ess Hém p 12 (1832), Burm Handb n, p 244 (1835), Amy § Seiv Hem p 386 (1843)

Sanguineous, antennæ (excluding base), scutellum, inner area of cornum, membrane, body beneath (excluding lateral margins), intelmediate and posterior

femora (excluding apices), apices of tibies, and the tarsi violaceousblack; body and antennæ finely pilose, lateral margins of body and legs longly pilose, antennæ with the basal joint a little longer than the second; head thickly finely pilose and distinctly trans-

rersely impressed behind eyes, posterior pronotal angles rounded. subnodulose

Length 16 to 17 millim.

Hab Bengal. Ceylon (Green).

Genus HARPACTOR

Harpactor, Lap Ess Hêm p 8 (1832), Amy § Serv (part) Hêm p 364 (1843); Freb Eu: Hem pp 42 & 152 (1861)
Reduvius, Fab. (part) Syst Ent p 729 (1775), Syst Rhyng. p 266 (1803), Stål, Hem Afr. 111, p 75 (1865)

Subg Zostus, Hypertolmus, Diphymus, Chirillus, Lamphrus, Flarpiscus, Stal, En Hem 1v, pp 37-39 (1874)

Oncauchenius, Stal, Ofv Vct-Al. Forh 1872, No 6, p 46. 2) Rhmicoris, Kolenaii, Melet Ent vi, p 42 (Bul. Soc. Imp. Nat 72 Mosc xxix, p 460) (1856) Rhynocous, Hahn, Wanz Ins. 11, p 20 (1834)

22

Dinocleptes, Agricolopius, Stal, Ofv Vet -Al. Forh 1866, pp 284, 285

Aprepolestes, Stal, Hem Fabr 1, p 111, note (1868). Coranideus, Reut Act Soc. Sc Fenn xii, p 296 (1881).

Type, H. racundus, Poda, a Palæarctic species.

Distribution. Palwarctic, Ethiopian, and Oriental Regions.

Body oblong or subelongate, head oblong or moderately elongate, anteriorly unarmed; rostrum with the basal joint variable in length, but always considerably shorter than the two apical joints together; pronotum constructed before the middle, posterior lobe without spinous tubercles, apical angles rounded; scutellum triangular; hemelytra of variable length, reaching or passing abdominal apex; legs of variable length, femora unarmed, anterior femora sometimes incrassated

A. Posterior lobe of pronotum rugosely granulate.

1226 Harpactor marginatus, Fab. (Reduvius) Ent Syst 1v, p 190

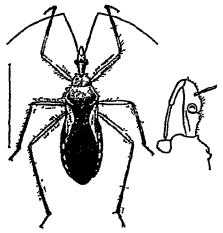


Fig 216 -Harpactor marginatus

(1794), Stål (Chirillus), En Hem 1v, p 39 (1874); Reul Act Soc Sc Fenn xii, p 293 (1881); Dist A. M. N H (7) xi, p 205 (1903)

Sycanus? militaris, Kuby, J. Linn Soc, Zool xxiv, р 119 (1891).

Sanguneous; antennæ, eyes, scutellum, inner area of corium, membrane, abdomen beneath, and apical two-thirds of tibiæ violaceous-black; base of anteuno and lateral margins of abdomen sanguineous; disk of sternum, coxæ, trochanters, and anterior lohe of pro-

notum reddish-ochraceous, head as long as pronotum; basal joint

of rostrum reaching eyes; first joint of antennæ almost equal in length to anterior femora, ante- and postocular areas of head about equal in length; pronotum with the anterior lobe sculptured, the posterior lobe rugulose; corium rugulose, the transverse cell near base of membrane margined with sanguineous; membrane passing abdominal apex

Var. Abdomen beneath totally black

Length 19½ to 20 millim

Hub "North India" (Coll. Dist). Vizagapatam Ceylon (Green)

1227. Harpactor squalus, sp n

Black; pronotum, sternum, corium, and legs piceous, posterior lobe of pronotum and corium coarsely rugosely granulate; first joint of rostrum reaching eyes and longer than anteocular portion of head; ante- and postocular areas of head about equally long, first joint of antennæ almost as long as anterior femora; auterior pronotal lobe sculptured, with two small but distinct discal tubercles, and posteriorly centrally excavated; legs somewhat longly pilose; membrane passing abdominal apex.

Length 21 millim
Hab. Sikhim; Pankabari

- B. Posterior lobe of pronotum not, or very obscurely, rugosely granulate
 - a Head as long, or about as long, as pronotum
- a First joint of rostrum not, or scarcely, longer than anteocular area of head
- 1228. Harpactor fuscipes, Fab: (Reduvius) Mant Ins ii, p 312 (1787), id Syst Rhyng p 278 (1803), Still (Reduvius), Hem Fabr i p 110 (1868), Dist A M N H. (7) xi, p 205 (1903) Reduvius sanguinolentus, Wolff, Ic Cim iv, p 166, f. 160 (1804) Reduvius corallinus, Lepell & Serv Enc Meth x, p 279 (1825) Harpactor bicoloratus, Kirby, J Linn. Soc, Zool xxiv p 120 (1891)

Coral-red; antennæ, rostrum, central lobe, an oblong spot between antennæ, upper surface of postocular area and a lateral fascia behind eyes (both fused at base), anterior area of posterior lobe of pronotum (not reaching lateral margins), disk of scutellum, two spots to prosternum, bases of pro-, meso-, and metasterna, segmental fasciæ to abdomen beneath, and the legs black; first joint and base of second joint to rostrum, and spots near coxæ, coral-red. clavus, interior area of corium, and membrane fuscousviolaceous; basal streak on under surface of anterior femora luteous, sometimes obsolete; head as long as pronotum; basal joint of rostrum not passing eyes; first joint of antennæ a little shorter

than anterior femora, ante- and postocular areas of head about equal in length, pronotum with the anterior lobe distinctly sculptured, posteriorly centrally finely impressed, posterior lobe not impressed, membrane passing abdominal apex, its posterior margin pale fuliginous

Length 14 to 16 millim.

Hab. Bombay (Letth); Bot Ghát (Devon) Ceylon (Green)

1229 Harpactor costalis, Stal (Reduvius), Ofv Vet-Ah Forh 1866, p 285, Reut (Reduvius) Act Soc Sc Fenn xii, p 293 (1881)

Black, a spot between and a lateral spot behind eyes, anterior lobe of pronotum (excluding its basal margin), lateral margins and basal area of posterior pronotal lobe, apex of scutellum, broad lateral areas of corium, connevivum, coxe, trochanters, and abdomen beneath coral-red; head beneath, fasciate spots to femora beneath, and segmental transverse fasciæ, which are widened laterally but do not reach margins, luteous, spots to connexivum and segmental fasciæ reaching margins black, head as long or very slightly longer than pronotum, basal joint of rostrum not passing eyes, first joint of antennæ a little shorter than anterior temora, ante- and postocular areas of head about equal in length, pronotum with the anterior lobe obscurely sculptured, centrally impressed, posterior lobe not impressed, membrane passing abdominal apex, its apex fuliginous

Length 12 to 14 millim

Hab Bengal (Stockholm Mus) Assam, Khási Hills (Chennell). Burma: Bhamo, Karennee (Fea)—Malay Peninsula Celebes (Coll Dist.)

b First joint of rostium distinctly longer than anteocular area of head

al. Pronotal lobes concolorous

1230 Harpactor marginellus, Fabi (Reduvius) Syst Rhyng p 271 (1803), Stål (Reduvius), Hem Fabi i p 111 (1808), id. (Lamphrius) En Hem iv, p 39 (1874)

Var vicinus, Stål (Reduvius), Ofo Vet-Al Ford 1859, p 202

Black, very thickly griseously sericeous; head and legs shining black, moderately pilose, lateral margins of abdomen ochraceous or reddish-ochraceous

Var a Abdominal lateral maigins spotted with black.

Var b. Posterior lateral margins of pronotum ochraceous or ieddish-ochraceous

Var c. Resembling var. b, but with the temora testaceous.

Head as long as pronotum, basal joint of rostium just passing eyes, first joint of antennæ about equal in length to anterior femora; ante- and postocular areas of head about equal in length; pronotum with the anterior lobe obscurely sculptured, posteriorly

centrally impressed, posterior lobe sericeous, but not regulose; membrane brownish-piceous, passing abdominal apex.

Length 12 to 15 millim.

Hab Assam, Margherita, Khási Hills (Chennell). Sikhim. Burina; Palon, Bhamo, Kaiennee (Fea)—Aden (Yerbury).

1231. Harpactor reuteri, Dist (Marpiscus) 7/ L S 1879 p 125; id Sec Yark Miss, Rhynch p 11, f 9 (1879).

Black, shming, trochanters and bases of femora sanguineous; head with the ante- and postocular areas about equal in length, the last robust, not very prominently narrowed, rostrum with the first joint a little longer than the anteocular portion of head; first joint of antennæ a little shorter than anterior femora, anterior lobe of pronotum broadly centially impressed.

Length 16 to 18 millim

Hab. Sind valley, Kashmi (Stoliczka), Sylhet (Brit Mus.) — Baltistan (Brit Mus.)

1232. Harpactor tristicolor, Reut (Diphymus) Act Soc Sc Fenn. xii, p 291 (1881)

Body, with antennæ, rostrum, and legs black, shining, sparingly griseously pilose; legs long, remotely pilose; a transverse spot between eyes and bases of antennæ (both sometimes obsolete) testaceous, connexivum pale stramineous, with large black spots, these spots much smaller in the male; head about as long as pronotum, postocular a little longer than anteocular area; rostrum with the basal joint reaching eyes, a little longer than anteocular portion of head; first joint of antennæ about as long as anterior femora, pronotum with the anterior lobe distinctly bituberculate; apical areas of femora moderately nodulose

Length 13 to 14 millim.

Hab. Sikhim, Mungphu (Atkinson) Assam (Brit. Mus) Upper Burma (Bingham), Rangoon, Pegu, Arakan (Atkinson Coll.).—Cambodia (Bit Mus)

b' Pronotal lobes not concolorous, posterior lobe luteous.

a². Abdomen beneath unreolorous

1233 Harpactor nigricollis, Dall (Anlus) Tr E S 1850, p 8, pl 11, f 5, Stål (Reduvius), Ofv Vet -Ak Forh 1866, p 286; Dist. A M N H (5) 111, p 133 (1879)

Head, rostrum, antennæ, anterior lobe of pronotum, scutellum, sternum, and legs black; head beneath, posterior lobe of pronotum, corium, and posterior area of prosternum luteous; connexivum and abdomen beneath sanguineous; membrane pale brownish, its apical area paler; head about as long as pronotum, anteocular as long as postocular portion; first joint of antennæ shorter than

anterior femora, first joint of rostrum reaching posterior margin of eyes, anterior lobe of pronotum not sculptured and with a central cruciform impression, anterior femora distinctly curved, membrane passing abdominal apex.

Length 13 to 14 millim.

Hab Bhutan. Sikhim, Darjeeling. Burma; Karennee (Fea)
—Sumatra (Forbes).

1234. Harpactor milgiriensis, Dist. A M N. H (7) x1, p 75 (1903).

Head, lateral areas of meso- and metasterna, intermediate and posterior coxæ, legs, and abdomen above black; posterior lobe of pronotum, corium, spots to connexivum, fascia to head beneath, and the abdomen beneath luteous, broad biannulations to femora, rostrum, anterior coxæ, and anterior lobe of pronotum reddishochraceous; antennæ piceous, first joint (excluding base and apex) brownish-ochraceous, shorter than anterior femora, rostrum with the first joint reaching eyes, longer than anteocular portion of head, which is shorter than postocular portion, head about as long as pronotum; membrane pale bronzy, passing abdominal apex

Length 8½ millim

Hab. Nilgiri Hills (Hampson).

1235. Harpactor pygmæus, Dist A.M. N H (7) x1, p 75 (1903)

Head, anterior lobe of pronotum, anterior area of prosterium, the meso- and inetasterna, coxæ, and legs black, posterior pronotal lobe, broad biannulations to femora, connexivum, and abdomen pale sanguineous; head beneath and corium luteous; scutellium piceous, centrally reddish-brown, connexivum with a black spot on each of the last three segments; membrane pale bronzy, just passing the abdominal apex; first joint of rostrum reaching eves, a little longer than anteocular portion of head, which is a little shorter than postocular portion, head about as long as pronotum; antennæ piceous, first joint a little shorter than anterior temora.

Length 7 millim.

Hab Nilgiri Hills (Hampson)

b2 Abdomen beneath fasciated with black

1236 Harpactor flavus, Dist. A M N. H (7) x1, p 206 (1903) Harpactor chersonesus, Dist loc cit. p 207

Posterior lobe of pronotum and body beneath pale luteous; head above, a lateral fascia on each side of head behind eyes, antennæ, rostrum, anterior lobe of pronotum, anterior area of prosternum, disks of meso- and metasterna, coxæ, and legs black; abdomen beneath with black lateral, segmental, transverse fasciæ, sometimes with only two or three black marginal spots; scutellum black with the apex luteous; corium ochraceous or brownish-ochraceous; membrane bronzy-brown, connexivum luteous,

spotted with black; rostrum with the first joint reaching eyes, longer than the anteocular portion of head; postocular portion of head slightly longer than anteocular portion; head about as long as pronotum, first joint of antennæ shorter than anterior femora, posterior pronotal lobe not quite twice as long as anterior lobe

Var a Corium testaceous with the basal area black.

Var b Resembling typical form, but with the connexivum

unicolorous, pale sanguineous.

Var. c. Resembling var. a, but with one or two discal piceous spots to posterior lobe of pronotum; femora biannulated with ochraceous

Length 10 to 11 millim.

Hab. Assam, Margherita (Doherty) - Burma; Karennee, Schwegoo Mvo (Fea) Tenasserim.—Penang (Ridley, Brit Mus.) China, Hongkong (Brit. Mus.)

b. Head longer than pronotum

1237 Harpactor longifrons, Stål (Charontus), En Hem 1v, p 41 (1874)

Ferruginous, griseously sericeous, beneath more obscurely coloured, lateral areas of head behind eyes black; membrane fuscous; abdominal margin palely spotted; head a little longer than pronotum, anteocular longer than postocular portion; basal joint of rostrum equal in length to anteocular portion of head; posterior pronotal lobe anteriorly longitudinally impressed, posterior angles lobate; first joint of antennæ distinctly shorter than head

Length, Q, 12 millim

Hab. Pondicherry (Stockholm Mus.).

I have not seen this species

Genus BIASTICUS.

Biasticus, Stål, Öfv Vet-Al. Forh 1866, pp. 284 & 290, id En Hem iv, p 13 (1874)

Type, B unpiger, Stal, a Malayan species.

Distribution Oriental Region.

Body elongate; head subelongate, almost as long as the pronotum, postocular a little longer than anteocular area, rostrum with the first joint shorter than the second, a little longer than anteocular area of head; first joint of antennæ a little longer than pronotum; anterior lobe of pronotum longitudinally impressed, posterior lobe with a distanct, central, anterior, longitudinal elevation; scutellum not apically produced; hemelytra passing the abdominal apex; legs moderately long and slender; femora apically moderately nodulose, anterior femora very slightly increaseated.

1238 Biasticus abdominalis, Reut Rev d'Ent vi, p 153 (1887)

Black, posterior lobe of pronotum, hemelytra, central fascia to

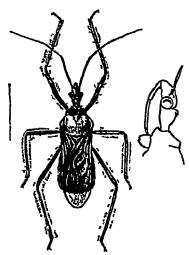


Fig 217 -Brasticus abdominalis

head beneath, and posterior margins of pronotum dull ochraceous: segmental incisures of connexivum, above and beneath. bright pale castaneous, finely pilose; first joint of rostrum reaching the posterior margin of eyes, basal joint of antennæ subequal in length to anterior anterior longitudinal femora, elevation to posterior pronotal lobe well pronounced, the posterior angles subnodulose; lateral and apical margins of membrane pale hyaline; legs somewhat longly pilose.

Length 13 millim

Hab. "North India" (Reuter).

Burma; Karennee

1239. Biasticus fuliginosus, Reut Rev d'Ent vi, p 152 (1887)

- 3. Black, shining; head and legs fuscously pilose; collar and abdomen whitish-flavescent, basal halves of the three basal segments, and the fourth and fifth segments totally, black; first joint of antennæ obscurely testaceous
- Q. Fuliginous, head and legs griseously pilote; head with the apex and under surface, base of lostrum, first joint of antennæ, trochanters, and abdomen dull testaceous-flavescent, the last with two medial fuliginous fasciæ, membrane fuscous-vinaceous. Head a little shorter than pronotum, ante- and postocular areas of head equal in length, first joint of rostrum a little shorter than second joint, first joint of antennæ subequal in length to head and anterior lobe of pronotum, anterior lobe of pronotum very strongly impressed at base and obtusely bituberculate, posterior lobe twice as long as anterior and anteriorly, tuberculously, oblongly, longitudinally elevated, abbreviated before middle, lateral angles rounded, lateral margins posteriorly reflexed, abdomen moderately ampliated and rounded on each side; femora near apices nodosely incrassated, anterior tibiæ equal in length to femora and trochanters together.

Length 9 millim

Hab. "North India" (Coll Signoret)

I have not seen this species

Genus SPHEDANOLESTES.

Sphedanolestes, Stål, Öfv Vet -Ak Forh. 1866, pp 284 & 288, id Hem Fabr 1, p 111 (1868), id En. Hem iv, p 13 (1874).

Harpactor (part), Puton, Cat p 39 (1886)

Subg Sphactes, Lussonycton, Aulacosphodrus, Stål, Öfv Vet-Ak

Förh 1870, pp 687, 688, 690 note Graptosphodrus, Stål, Ofv Vet -Al Forh 1866, p 284.

Hæmactus, Stål, En Hem 1v, p 34 (1874).

Type. S impressicollis, Stal, a Chinese species.

Distribution Palmarctic, Ethiopian, and Oriental Regions.

Body oblong; head about equal to or very slightly longer than the pronotum, ante- and postocular areas about equally long, or the last a little the longest; area of the ocelli a little elevated. rostrum with the basal joint longer than the anteocular area of the head, antennæ with the first joint subequal to the head or a little longer; pronotum with the anterior and posterior lobes conjointly longitudinally impressed, posterior lobe about twice as long as anterior; hemelytra not or very slightly passing abdominal apex, abdomen a littlé broader than hemelytra, legs of moderate size; femora near apices obsoletely subnodulose; anterior femora not or slightly incressated.

A Pronotum black, unicolorous, or palely pubescent.

1240. Sphedanolestes pubinotum, Reut. Act Soc. Sc Fenn XII, p 289 (1881)

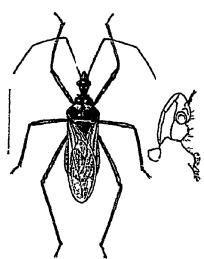


Fig 218 - Sphedanolestes pubinotum

Black, shining; head, pronotum, scutellum, corium, and sternum thickly greyishly pubescent, abdomen sanguineous, beneath with three or four transverse black fasciæ, but these are sometimes absent; head with the postocular a little longer than the anteocular area; first nomt of rostrum a little longer than anteocular portion of head and much shorter than second joint, first joint of antennæ as long as antemorfemora; central impression to pronotum continued to about middle of posterior lobe; membrane longly passing abdominal apex.

Length 15 to 16½ millim Hab Sikhım; Darjeeling (Stockholm Mus.) Assam; Khásı

Hills (Chennell) Burma; Karennee (Fea). VOL. II

2 A

1241. Sphedanolestes pulchriventris, S'&l (Reduvius), Ann Soc. Ent F: 1863, p. 37.

Violaceous black, shining, slightly and sparingly pilose; hemelytra strongly tinted with violaceous, connexivum and abdomen sangumeous, spots to connexivum above and beneath, and lateral fasciate spots to abdomen beneath, black, margins of the segmental incisures luteous, head a little shorter than pronotum, anteocular and postocular areas about equal in length; basal joint of rostrum reaching eyes, a little longer than anteocular area of head; first joint of antenim about as long as anterior femora, which are distinctly nodulose, pronotum with a broad central impression which reaches middle of posterior lobe; membrane longly passing abdominal apex.

Length 14 to 15 millim.

Hab. " North India" (Brit. Mus.).

1242. Sphedanolestes funeralis, Dist A M N H. (7) xi, p 210 (1903)

Black, trochanters sanguneous, elongate, hirsue, second joint of rostrum longer than the first; head a little shorter than pronotum, the anteocular about as long as the postocular portion, basal joint of rostrum reaching eyes, a little longer than auteocular area of head, posterior lobe of pronotum finely but distinctly sulcate, the posterior angles rounded, membrane passing the abdominal apex. The colour above is somewhat opaque, on the under surface and legs it is shining with an indigo tint

Length 16½ millim.

Hab. Kashmir (Brit. Mus)

1243 Sphedanolestes indicus, Reut Act Soc Sc Fenn. vii, p 289 (1881)

Black; corium and bases of femora piceous, very sparingly and obscurely palely pilose; connexivum and a large spot before apex of abdomen beneath sanguineous; connexivum spotted with black, antennæ with the first joint about as long as antenor femora, anterior pronotal lobe centrally sulcated, posterior lobe discally broadly impressed, membrane bronzy-brown, passing abdominal apex, lateral pronotal angles obtusely subprominent and rounded.

Length 12½ millim.

Hab "India orientalis" (Stockholm Mus.)

By the kindness of Dr. Sjostedt I have been able to examine and compare this species

B. Pronotum black, anterior lobe and posterior margins sanguineous

1244 Sphedanolestes mendicus, Stâl (Reduvius), Öfv Vet²Ak Forh 1866, p 286. id (Lamphrius) En Hem iv, p 39 (1874); Leth & Sev (Harpactor) Cat Gén Hém t in, p 160 (1896)

Black; head, anterior lobe of pronotum, lateral and posterior margins of posterior lobe of pronotum, lateral margins and apex of scutellum, sometimes whole of scutellum, connexivum above and beneath, coxo and trochanters sanguineous; head with a large spot behind eyes black. Head about as long as pronotum; first joint of rostrum slightly longer than anteocular portion of head, which is subequal in length to postocular area; pronotum distinctly impressed on posterior lobe, membrane longly passing abdominal apex.

Var. a Head wholly sanguineous, legs sanguineous, apices of

tibiæ and the tarsi piceous

Var. b Head, excluding apex and under surface, black; legs black.

Var c Femora sanguineous, tibiæ black.

Length 11 to 14 millim.

Hab. Assam, Khási Hills (Chennell) Bui ma; Palon, Karennee, Bhamo (Fea) Tenasserim, Meetan (Fea) Mergui (Coll Dist).—Malay Pennsula, Pahang (Cradock)

C. Pronotum bicoloured, anterior lobe and posterior margins black.

1245 Sphedanolestes stigmatellus, Dist A M N H (7) x1, p 209 (1903)

Black; anterior area of posterior pronotal lobe, lateral area of corium, posterior margin of prosterium, anterior coxæ, and disk of abdomen beneath sanguineous, head beneath, a spot near both the intermediate and posterior coxæ, abdominal margin, and a submarginal series of large subquadrate spots very pale luteous; the abdominal margin black at incisures on posterior half and the submarginal spots margined with black; greyishly pilose; head about as long as pronotum, second joint of rostrum considerably longer than the first; sulcation to anterior lobe of pronotum profound, posterior lobe broadly and much more obscurely sulcate.

Length 8 millun

Hab Nilgiri Hills; Utakamand (Atkinson, B. it. Mus)

1246 Sphedanolestes signatus, $Dist\ A\ M\ N\ H$ (7) $\lambda i,\ p$ 209 (1903)

Black, disk of posterior lobe of pronotum, lateral areas of prosternum, connexivum, and abdomen beneath pale creamy 2 1 2

luteous, corrum luteous, with the verns black; membrane pale bronzy; postocular portion of the head much longer than the anteocular portion, second joint of rostrum much longer than the first; head about as long as the pronotum; posterior pronotal lobe broadly sulcated, anterior lobe finely deeply sulcate, posterior pronotal angles subprominent, rounded

Length to apex of membrane 81 millim.

Hab. Nilgiri Hills; Utakamand (Atkinson, Bit. Mus)

1247. Sphedanolestes dives, sp n

Pale luteous; head, antennæ, rostrum, anterior lobe and a large basal fascia divided at centre of posterior lobe of pronotum, scutellum (excluding apex), disk of abdomen above, disk of sternum, coxæ, trochanters and legs, and transverse linear spots to connexivum black, margins of abdomen above and beneath ochraceous; coxal spots and head beneath pale luteous; head a little shorter than pronotum, postocular a little longer than anteocular area of head; first joint of rostrum reaching eyes, a little longer than anteocular area of head; first joint of antennæ as long as anterior femora; pronotum broadly centrally impressed, the impression continued to middle of posterior lobe, apical areas of femora distinctly nodulose.

Length 7 to 7½ millim

Hab Burma; Mandalay (Bingham, Brit Mus.), Toungoo (Bingham, Brit Mus).

D. Pronotum bicoloured; markings variable.

1248. Sphedanolestes variabilis, sp. n

Luteous; head above and lateral areas behind eyes, anterior lobe of pronotum, scutellum (excluding apex), spots to connexivum above and beneath, anterior area of prosternum, the meso- and metasterna and coxe black, antennæ, rostrum, and legs pale castaneous; apex of rostrum, basal, central and broad apical annulations to femora, bases and apices of tibiæ, and the tarsi black; first joint of rostrum reaching eyes, slightly longer than anteocular area of head, which is about equal in length to post-locular area, head about as long as pronotum; both lobes of pronotum sulcately impressed; first joint of antennæ a little shorter than anterior femora, which have their bases and apices infuscated.

Var. a Posterior lobe of pronotum more or less infuscated, legs wholly black.

Var. b. Resembling var. a, but with the pronotum black, a small central luteous spot on posterior lobe.

Length 7 to 8 millim.

Hab. Nilgiri Hills, Kotagiri (Athenson, Brit. Mus.), Utakamand (Athenson, Brit. Mus.)

E. Pronotum sanguineous.

1249. Sphedanolestes annulipes, D_{ist} A. M N H. (7) xi, p 75 (1903)

Black; pronotum, prosternum, and anterior and intermediate coxe sanguineous; connexivum, biannulations to femora, head beneath, first joint of rostrum (excluding base), and abdomen beneath pale creamy-luteous; marginal areas of abdomen with tessellate black markings enclosing two series of large luteous spots, connexivum above with the last two segmental incisures black; second joint of rostrum longer than the first, which is a little longer than anteocular area of head; postocular portion of the head longer than the anteocular portion; head about as long as the pronotum, which has the central sulcation profound and reaching middle of posterior lobe, the posterior angles subprominent and jointed.

The pronotum varies in colour from sanguineous to reddish ochraceous; the scutellum is either of that colour, or has its margins and apex black, or is entirely black; the pronotal posterior angles are sometimes black

Length 7 to 8 millim

Hab. Burma, Karennee, Bhamo (Fea), Northern Shan States (Bingham, Brit. Mus)

1250 Sphedanolestes nigro-ruber, Dohin (Reduvius), Stett. ent.

Zeit xxi, p. 406 (1800), Stål (Hæmactus), En Hem iv, p. 34 (1874).

"Sanguineous, shining; head, membrane, legs (coxe excepted), last segment of abdomen, antennæ, and rostrum black, shining." (Dohrn)

To this description Stal adds the following —"Rostrum thick, second joint much longer than the first; base of head and spot on each side near eyes cornl-red."

Length 10 millim.

Hab. Ceylon (Coll Dohrn). I have not seen this species.

1251. Sphedanolestes trichrous, Stal (Hæmactus), En Hem iv, p 34 (1874)

Coral-red, sparingly setose; head, antennæ, rostrum, and legs black; a small lateral spot to head near eyes, base of head and base of femora coral-red, membrane fuscous-violaceous, posterior areas palely fuscescent hyaline. Allied to S. nigro-ruber, Dohrn, differing by the longer and two-coloured membrane, the posterior tibiæ moderately curved, the trochanters and bases of femora coral-red.

Length 11 millim.

Hab "India orientalis" (Stockholm Mus)

I have not seen this species.

Not examined; sectional position uncertain.

1252. Sphedanolestes sordidipennis, Dohrn (Reduvius), Stett ent Zeit. axi, p 406 (1860), Stäl, En Hem. iv, p 35 (1874)

"'Sordidus', head black, shining, underneath palely 'sordidus'; pronotum anteriorly red, posteriorly griseous-castaneous; scutellum black. hemely tra 'sordida,' apex infuscated, abdomen beneath palely obscurely flavous, legs black, pilose, shining, femora annulated with fuscous, antennæ and rostrum fulvous, shining" (Dohrn.)

Stal, who examined the type, writes —"Rostrum and hemelytra pale, and femora biannulated with flavous-testaceous, pronotum biannulated with flavous-testaceous, posterior lobe only slightly

impressed, scutellum black"

Length 8 millim. Hab. Ceylon.

I have not seen this species.

Division VESBIARIA.

This small division is distinguished by the structure of the head, the postocular being nearly three times longer than the anteocular area; the eyes are inserted near the apex of the head.

Only one genus can be included according to our present

knowledge of this fauna.

Genus VESBIUS

Vesbius, Stål, Hem. Afr in, p. 50 (1805), id. Ofv Vet-Ak Forh 1870, p 684, id. En. Hem iv, p 18 (1874).

Type, V. pur purcus, Thunb Distribution Oriental Region.

Body ovately subelongate; head with the postocular very much

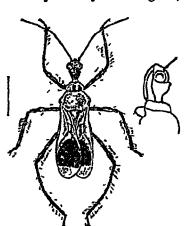


Fig 219 - Vesbius purpureus

longer than the anteocular area, the eyes inserted near apex, first and second joints of rostrum subequal in length; femora with the apical areas nodulose, anterior tibiæ much longer than the anterior femora and trochanters together, scutellum subtriangular; membrane considerably passing the abdominal apex.

1253. Vesbius purpureus, Thunb (Cimex) Nov Ins Sp. 111, p. 57 (1784); 2d (Reduvius) Hem Rostr Cap 111, p 4 (1822) Harpactor milthinus, Herr-Schaff Wanz Ins. viii, p 82, f 850 (1848)

Sanguineous; head (excluding base), antennæ, rostrum, tro-

chanters, legs, and membrane (excluding base) black; apical third of membrane hyaline, first joint of antennæ subequal in length to anterior femora; lateral angles of the posterior pronotal lobe subnodulose; legs largely pilose, the femora distintly nodulose

Length 7 to 8 millim.

Hab. Assam, Khási Hills (Coll. Dist.). Ceylon (Green). Burma, Bhamo (Fea) — Java. Philippines.

1254. Vesbius sanguinosus, Stål, En Hem iv, p. 36 (1874).

Allied to the preceding species (V purpureus), but larger, the trochanters and bases of femora sanguineous.

Var. a. Membrane broadly sanguineous at base, its apical third

hyaline; basal two-thirds of femora sanguineous.

Var. b. Basal area of membrane not sanguineous, its apical half hyaline; basal third of femora sanguineous.

Length 8 to 11 millim

Hab. Assam; N Khási Hills (Chennell). Burma; Bhamo, Karennee (Fea) Tenasserim, Thagata (Fea) — Malay Peninsula; Perak (Coll Dist) Java; Borneo.

Division VELINARIA.

In this division the head is about as long as the pronotum or very little shorter, the apical areas of the femora nodulose or subnodulose; the anterior tibiæ as long as the anterior femora and trochanters together, or longer, the lateral margins of the fourth and fifth abdommal segments moderately dilated.

Synopsis of Genera

A Scutellum with the apex spatulately dilated, first joint of antennæ about as long as anterior femora

COSMOLESTES, p. 345

B. Scutellum not spatulately dilated at apex, first joint of antennæ very much longer than anterior femora

VELINUS, p 346

Genus COSMOLESTES

Cosmolestes, Stål, Ofv Vet -Al. Forh 1866, p 285 note; id Hem Fabr. 1, p 111 (1868), id. En. Hem 1v, p 14 (1874)

Type, C. pictus, Klug, an African and South-east Palæarctic species.

Distribution Ethiopian, S.E. Palæarctic, and Oriental Regions. Body ovately subelongate; head shorter than pronotum, post-ocular much longer than anteocular portion, which is also a little shorter than first joint of rostrum; first joint of antennæ about as long as anterior femora, pronotum with the anterior angles acutely prominent, anterior lobe medially impressed, lateral angles subnodulose; scutellum with the apex spatulately dilated; femora with their apical areas subnodulose, anterior tibiæ slightly longer

than the anterior femora and trochanters together; margins of fourth and fifth abdominal segments moderately dilated.

1255. Cosmolestes annulipes, Dist A. M N H (5) m, p. 132 (1879)

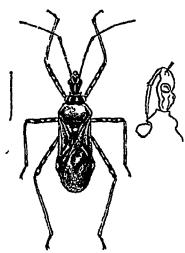


Fig 220 - Cosmolestes annulipes

Luteous; head, anterior lobe of pronotum, a spot near each lateral angle of posterior lobe, scutellum, margins of meso- and metasterna, abdominal incisures, dilated laterally and enclosing luteous spots, annulations to femora and basal annulations to tibiæ black; head with an oblique fascia in front of eyes, a central apical fascia, a central line to postocular area, and the under surface luteous; scutellum with a central discal line and broad spatulate apex luteous; apical margins of corium elevated and luteous; apices of first and second joints of rostrum piceous

Length 10 millim.

Hab Assam; Eastern Gáro

Hills (Chennell) Burma; Karennee (Fea).

1256. Cosmolestes picticeps, Stal (Reduvius), Ofv Vet-Ah Föih 1859, p. 204; id En Hem 11, p 32 (1874)

Ochraceous; head above, scutellum, apices of femora, bases of tibiæ, bases of antennæ, apex of rostrum, and sublateral transverse spots to abdomen beneath black, an oblique line in front of each eye and a central discal line to postocular area of head, spatular apex to scutellum, and the elevated apical margins of corium luteous; basal joint of rostrum about reaching posterior margin of eyes; apices of femora distinctly nodulose, membrane considerably passing abdominal apex

Length 11 to 12 millim.

Hab. Sylhet (Stockholm Mus) — Malay Peninsula, Java; Sumatra, Borneo.

Genus VELINUS

Velinus, Stål, Hem Afr in, p. 52 (1865), id Öfv Vet-Ak. Fork 1870, p 689, id. En Hem iv, p 12 (1874)

Type, V. lobatus, Stal, from Siam and Cambodia

Distribution. Oriental Region, China, and Madagascar.

Abdomen moderately dilated, fourth segment, or fourth and fifth on each side, rotundately ampliated; legs long, femora nodulose at apices; head about as long as pronotum or very little shorter, postocular much longer than anteocular area, which is also a little shorter than first joint of rostrum; first joint of

antenna very much longer than anterior femora; anterior tibiæ about as long as anterior femora and trochanters together, scutellum subtrangular, apex not spatulately ampliated

1257. Velinus malayus, Stâl (Reduvius), Ann Soc Ent F1. 1863, p 38.

Luteous; head above, scutellum, corium, lateral areas of abdo-

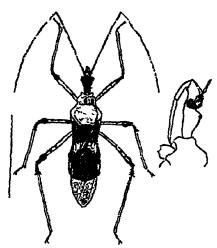


Fig 221 - Velenus malayus

men beneath, spots to connexivum above and beneath, apices of femora and bases of tibiæ black; a medial line to head behind eyes, base and a transverse fascia to corium near apex, numerous small spots to the black area of abdomen, pale luteous; membrane fuscous, its apex fuliginous, auteume fuscous, palely annulated; first joint of antenne twice as long as head; basal joint of rostrum about reaching posterior margin of eyes; fourth and fifth abdominal segments laterally ampliately produced; apical areas of

femora nodulose and with bases of tibiæ distinctly hirsute

Var. As in specimen figured, with the femora annulated with foscous.

Length 18 to 21 millim.

Hab. Burma; Karennee (Fea) — Malay Peninsula

1258 Velmus annulatus, Dist. A M N. H (5) m, p. 131 (1879)

Luteous; head above, antennæ, scutellum, spots to connexivum above and beneath, irregular shadings to lateral areas of abdomen beneath, annulations to femora, basal annulations and apices to tibiæ, and tarsi black; medial linear lines to both areas of head, lateral areas in front of eyes and a linear spot behind eyes, annulations to basal joint of antennæ, and apex of scutellium luteous; corium purplish-red, membrane brouzy-black, its apical area pale fuliginous. first joint of antennæ about twice the length of head; basal joint of rostrum almost reaching posterior margin of eyes, anterior lobe of propotum medially impressed, the impression continued to anterior area of posterior lobe.

Var. a Tibiæ wholly black, with two luteous annulations near

และ

Length 15 to 16 millim.

Hab. Assam; East Gáro and North Khásı Hılls (Chennell). Burma; Karennee (Fea).—West Yunnan

Division SYCANARIA.

Head long, slender, distinctly longer than pronotum, pronotum with the anterior lobe posteriorly impressed, beyond the anterior area of the posterior lobe the impression is not continued, abdomen on each side much dilated, postocular area of head much longer than anteocular area; second joint of rostrum longer than first.

Synopsis of Genera.

A Pronotum and scutellum unarmed
a. Body depressed, flattened.
a First joint of rostrum a little shorter than second
b Second joint of rostrum twice as long as first
b. Body not depressed or flattened
B Pronotum with the posterior lobe provided with two tubercles near base, scutellum unarmed
C Pronotum unarmed, scutellum usually with a long apical spine

Sycanus, p 351

Genus HOMALOSPHODRUS

Homalosphodrus, Stål, Öfv Vet-Ak. Forh 1866, p. 278, id En Hem iv, p 11 (1874)
Parsialus, Stål, Ann Soc Ent Fr 1863, p. 33

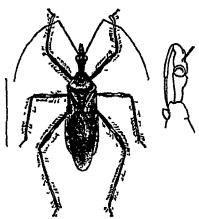


Fig 222 -Homalosphodrus brachialis

gether; femora subnodulose; membrane considerably passing abdominal apex.

Type, H. depressus, Stal Distribution Oriental Region. strongly depressed, head much longer than pronotum, nearly as long as anterior femora, postocular longer than the anteocular area, basal joint of antennæ a little longer than head; rostrum moderately slender, first joint a little shorter than second; pronotum and scutellum unarmed, abdomen on each side moderately dilated, legs long, of moderate thickness, anterior femora a little incrassated, anterior tibiæ as long as anterior femora and trochanters

349

1259. Homalosphodrus brachialis, Stal (Parsialus), Ann. Soc. Ent. Fr. 1863, p 34.

Black, impunctate, fuscously pilose; intermediate and posterior femora with a pale stramineous annulation beyond middle; apices of intermediate and posterior tibue pale ochraceous; abdomen sanguineous, connexivum (excluding apex) black with pale stramineous spots above and beneath; anterior lobe of pronotum centrally impressed; apex of membrane fuscous-brown, somewhat longly passing abdominal apex; legs longly pilose; basal areas of tibue a little incrassated

Var. Legs unicolorous; only posterior femora obscurely annulated

Length 17 millim.

Hab. Assam; East Guro Hills (Chennell) Burma (Coll Dist) — Philippine Islands (Brit Mus.).

1260. Homalosphodrus depressus, Sill (Parsialus), Ann Soc Ent Fr. 1863, p 34

Black, impunctate, fuscously pilose; connexivum pale stramineous, with large black spots above and beneath; sixth and anal abdominal segments sanguineous; hemelytra slightly tinted with violaceous, tibia slightly incrassated at base; anterior pronotal lobe centrally impressed; lateral pronotal margins oblique, posterior femora with a pale stramineous annulation beyond middle, legs longly pilose; abdominal margins dilated and slightly sinuate; apical areas of the tibiae, especially the intermediate and posterior tibiae, fuscous

Length 18 to 20 millim.

Hab. Assam, East Gáro Hills (Chennell).

It is probable that this and the preceding species may ultimately prove to be conspecific.

Genus NARSETES.

Narsetes, Dist. A. M. N. H (7) xi, p 358 (1903)

Type, N. longmus, Dist.

Distribution Oriental Region.

Head long, about as long as the pronotum and scutellum together, postocular portion a little longer than the ante-ocular; rostrum with the second joint very long, about twice as long as first; body depressed, flat; pronotum transversely constricted before middle, anterior lobe centrally sulcate, anterior angles obscurely tuberculous, posterior lobe entire, lateral angles obscurely angulate, but not prominent, posterior margin very slightly annuate, nearly straight; scutellum unarmed; hemelytra about reaching the apex of the abdomen, membrane nearly twice as long as corium; abdomen on each side moderately dilated and compressed; legs long, tibue about as long as femora, posterior

tibiæ a little longer; prosternum distinctly sulcated, antennæ with the first joint slightly longer than the anterior femora

Allied to the genus Homalosphodius, differs by structure of

rostrum, &c.

1261. Narsetes longinus, Dist A. M. N. H (7) xi, p. 358 (1903)

Black, shining; posterior lobe of pronotum and corium either ochraceous or greyish-white, margins of abdomen above and beneath luteous or ochraceous, sometimes spotted with black,

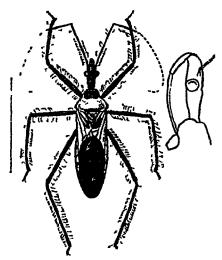


Fig 223 -Narsetes longinus

clavus (excluding basal area) piceous; body and legs moderately pilose, the lateral margins of head and the legs longly pilose; antennæ with the first joint slightly longer than the anterior femora.

Length 25 millim.

Hab. Assam; Khúsi Hills (Chennell).—Cambodia (Brit. Mus.)

Genus ARCESIUS.

Arcesius, Stål, Ann Soc Ent F: 1863, p 35, id En Hem iv, p 11 (1874)

Type, A. severus, Stål, from the Island of Batchian.

Distribution. Oriental and Papuan Regions.

Head long, much longer than pronotum, postocular much longer than anteocular portion of head, antennæ very long, slender, first joint subequal in length to, or a little longer than, head, rostrum moderately slender, basal joint subequal in length to anteocular portion of head, much shorter than second joint, pronotum strongly constricted before middle, anterior lobe unarmed, centrally impressed, posterior lobe with two tubercles near base, lateral

angles moderately prominent, posterior margin moderately reflexed; hemelytra passing abdominal apex; abdomen on each side ampliated and compressed; anterior tibus equal in length to

anterior femora and trochanters

together:

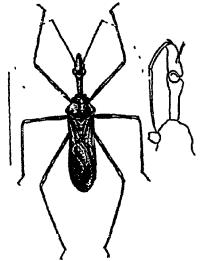


Fig 224 -Ai cestus fusculus

1262. Arcesius fusculus, sp n

Dark fuscous, biannulations to femora, second and third points of rostrum, coxe and trochanters brownish-ochraceous; head beneath, sixth segment and disk of anal segment ochraceous; head a little longer than pronotum and scutellum together; first joint of antennæ about as long as head with anterior lobe of pronotum; posterior pronotal lobe with two obscure and obtuse tuberculous

Length 22 millim. Hab. Burma; Karennee

Genus SYCANUS.

Sycanus, Amy & Serv Hém. p 360 (1843), Dohrn, Stell cut Zeit xx, pp. 93 & 96 (1859), Stell, Hem Afr in, pp. 51 & 72 (1865), ed En Hem 1v, p 11 (1874) Cosmosphodrus, Stal, Ofv Vet -Al. Forh 1866, p. 278

Type, S collaris, Fabr.

Distribution Ethiopian and Oriental Regions, and China.

Body elongately ovate; head long, somewhat slender, about as long as pronotum and scutellum together, postocular much longer than anteocular area; rostrum with the basal joint longer than anteocular portion of head, shorter than second joint; first joint of antenna about as long as anterior femora; pronotum constricted before middle, anterior lobe much narrower than posterior which is rugosely punctate; scutellum generally provided with a long erect spine; abdomen on each side strongly roundly ampliated

A. Scutellum with a long erect or subcrect spine, its apex bifid.

a. Pronotum black, unicolorous

a. Apreal half of corrum pale stramineous.

1263. Sycanus collaris, Fabr (Reduvius) Spec. Ins 11, p. 380 (1781) id (Zelus) Syst. Rhyng. p 285 (1803); Herr-Schaff. (Arilus) Wanz Ins. vui, p 37, f 813 (1848), Anny & Serv. Hêm p 360 (1843), Dohrn, Stett ent. Zert xx, p 98 (1859), Stål, En Hem 1v, p 28 (1874), Dist A. M N H (7) x1, p 212 (1903)

Cimex carbonarius, Gmel Syst Nat 1, iv, p 2199 (1788) Reduvius longicallis, Lepell. & Seiv. Enc. Méth. x, p 278 (1825) Sycanus leucomesus, Walk. Cat. Het. viii, p. 84 (1873)

Black, pronotum piceous, about apical half of corium (excluding

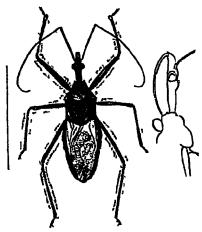


Fig 225 - Sycanus collaris

apical angle) and basal margin of membrane strammeous; membrane bronzy, antennæ black, basal and subapical annulations to first joint, subbasal annulation to second joint, and aper of rostrum castaneous; head about as long as pronotum and scutellum together; antennæ with the first joint subequal in length to anterior femora, scutellar spine long, a little obliquely erect, its apex distinctly and somewhat broadly bifid; abdomen strongly dilated on each side, especially at the third and fourth segments, the posterior angles of the third

and fourth segments more or less acute.

Length 22 to 25 millim

Hab Assam; North Khási Hılls (Chennell). Ceylon (Green).—Malay Peninsula, and several islands of the Malayan Archipelago

1264. Sycanus reclinatus, Dohrn, Stett. ent Zeit vx, p 98 (1859)

Closely allied in general markings and appearance to S collaris, but antenno without castaneous annulations, and the scutellar spine recurved posteriorly, not bliquely erect, its apex bifid, other characters as in S collaris

Length 19 to 20 millim Hab. Ceylon (Green)

b Apreal half of corum golden-yellow

1265 Sycanus croceovittatus, Dohrn, Steit. ent Zeit xx p 97 (1859)

Black; posterior lobe of pronotum piceous, about apical half of corium (excluding apical angle) and basal margin of membrane golden-yellow; second and third joints of rostrum pale castaneous; head about as long as pronotum and scutellum together; antenna unicolorous, first joint subequal in length to anterior femora, scutellar spine long, suberect, a little obliquely curved backward, its apex bifid; abdominal margins strongly ampliated and upwardly reflexed (especially the third and fourth segments), second, third,

SYCANUS 353

fourth, and fifth segments with a distinct tuberculous elevation on upper surface, posterior angles of second and third segments more or less acute

Length 22 to 25 millim.

Hab. Burma; Rangoon (Bingham), Karennee, Schwegoo-Myo (Fea).—Hanan Island (Coll. Dist.). China.

c. Apreal third of corium stramineous or ochraceous.

1266. Sycanus affinis, Reut. Act Soc. Sc Fenn xii, p 285 (1881)

Black, posterior lobe of pronotum sometimes piceous, about apical third of corium (excluding posterior angle) and basal margin of membrane very narrowly stramineous or ochraceous; membrane bronzy, rostrum with the second and third joints castaneous; head about as long as pronotum and scutellum together; antennæ unicolorous, first joint a little shorter than anterior femora; scutellar spine long, a little obliquely erect, its apex blid; abdominal margins dilated, especially the third and fourth segments, posterior angle of second segment acute, margins of third and tourth convex.

Length 24 to 26 millim

Hab. Assam; Margherita (Doherty), Sadiya Darjeeling (Stock-holm Mus) Malabar, Trivandrum (Coll. Dist.).

d. Apical margin of corium och accous.

1267. Sycanus bifidus, Fabi (Reduvius) Mant Ins 11, p 312 (1787);
id (Zelus) Syst Rhyng p 285 (1803), Westw (Harpactor) in
Don Ins China, p 50, pl. xx1, f 5 (1842); Dohrn, Stett ent.
Zeit xx, p 97 (1859), Sill, En Hem iv, p 28 (1874)
Stoll, Pun f 275

Head, corum, abdomen and legs shining blush-black, pronotum and sternum piceous; apical margins of corium and basal margins of membrane reddish-ochraceous; membrane bronzy-brown; connexivum unspotted. The antennæ (which are absent from the specimen examined) are stated by Dohrn to be annulated with ferrugineous. Head as long as pronotum and scutellum; pronotum granulate; spine of scutellum long, obliquely erect, its apex strongly bifid; abdomen laterally dilated, especially the third and fourth segments, posterior angles of the second and third segments more or less acute.

Length 21 to 22 millim.

Hab. Bengal.—Also recorded from China and Java.

b. Pronotum black, with the basal margins ochraceous.

1268. Sycanus semimarginatus, Walk Cat Het viii, p 85 (1873)

Head, antenne, and rostrum black; base of first joint of antenne and apex of rostrum castaneous; pronotum and sternum piceous, the first with the posterior lateral and basal margins ochraceous or testaceous, corium black, the apical area broadly stramineous; membrane bronzy-brown, its base stramineous, its apical area pale fuliginous, connexium above and beneath luteous, with broad transverse black spots; abdomen beneath black, with subobsolete luteous transverse fasciæ, coxæ, particularly the anterior, luteous; head about as long as anterior femora, first joint of antennæ about as long as head; pronotum granulate; apex of scutellum erect, obscurely bifid; abdominal maigins somewhat strongly dilated, especially the third and fourth segments, posteriof angles of the second and third segments more or less acute.

Length 22 to 23 millim.

Hab Sylhet (Bowring, Brit. Mus.).—Penang (Brit. Mus.).

c. Pronotum och aceous

1269. Sycanus villicus, Stat, Ann. Soc Ent. Fr 1863, p 34

Black; pronotum, lateral margins of prosternum, coxe, coxal spots, and apical half of corium (excluding apical angle) dark ochraceous, membrane pale bronzy, its basal margin dark ochraceous, apex of rostrum more or less castaneous; head about as long as pronotum and scutellum together; antennæ black, basal joint with two broad annulations, and second joint with a subbasal annulation, castaneous; scutellar spine long, a little obliquely erect, its apex bifid; lateral margins of abdomen broadly dilated, especially the third and fourth segments, posterior angle of second segment acute, the second, third, fourth, and little segments with a distinct tuberculous elevation on upper surface.

Length 26 to 27 millim.

Hab Burma (Coll. Dist. & Stockholm Mus.).—Cambodia (Brit. Mus.)

d. Pronotum syngumeous

1270 Sycanus falleni, Stål, Ann Soc. Ent Fi 1863, p. 34

Black; pronotum, corium, dilated connexivum, prosternum, coxe, costal spots, and posterior margins of abdominal segments beneath sanguineous, connexivum with broad, transverse, black segmental spots; membrane very pale bronzy, its basal margin sanguineous, extreme base of antenne, and a spot on each side of head in front of antenne, dull red, head about as long as pronotum and scutellum together; first joint of antenne subequal in length to anterior femora, scutellar spine longly obliquely erect, its apex bifid, abdomen on each side very strongly ampliated and directed upward, the margins irregularly convex, without inner tuberculous elevations.

Length 23 to 26 millim.

Hab. Tenasserim, Attaran Valley (Bingham) —Cambodia (Bint. Mus.)

BYOANUS. 355

B. Soutellum armed with a moderately long erect spine, its apex acute, not byfid.

1271. Sycanus pyrrhomelas, Walk. Cat. Het. viii, p. 85 (1873)

Sanguineous; head, rostrum, antennæ, apex of scutellum, clavus (excluding base), membrane, transverse segmental spots to connexivum, trochanters, legs, some irregular spots to sternum, and the abdomen beneath black; apex of rostrum dull red; head about as long as pronotum and scutellum together; first joint of antennæ a little shorter than anterior femora; scutellar spine only moderately long, erect, acute, not bifid; lateral abdominal margins moderately ampliated, posterior angle of second abdominal segment only obscurely acute.

Length 22 millim

Hab. "Hindostan" (Brit Mus.) Upper Burma (Coll Dist)

1272 Sycanus versicolor, *Dohrn, Stett ent. Zett* xx, p 96 (1859), *Dist A M N H* (7) xi, p 212 (1908). Sycanus miles, *Walk Cat Het* viu, p. 86 (1873)

Black; anterior lobe of pronotum, basal margin and lateral angles of posterior lobe, apex of scutellum, about apical third of corium, extreme basal margin of membrane, connexivum, apex of rostrum, prosternum, coxe, and costal spots sanguineous; connexivum above and beneath with broad black transverse spots; head about as long as pronotum and scutellum together; basal joint of antenne a little shorter than anterior femora; scutellar spine sanguineous, somewhat short, erect, its apex acute, not bifid; abdominal lateral margins amphated, apex of second segment very prominent.

Var. Extreme apical area of corium and basal margin of membrane ochraceous; abdomen beneath with transverse sanguineous fasciæ.

Length 18 to 21 millim.

Hab. Bengal. Burma; Teinzo (Fea). Tenasserim; Moulmein (Fea).—Penang (Brit. Mus.).

C. Soutellum with a short discal conical tubercle.

1273 Sycanus indagator, Still, Ann Soc Ent Fr. 1863, p 85

Black, posterior lobe of pronotum and corium sanguineous; lateral dilated abdominal margins flavescent or sanguineous?, fasciated with black; anterior lobe of pronotum impressed at base, posterior lobe rugosely punctate; scutellum with a short discal conical tubercle; hemelytra rugulose; abdomen a little dilated on each side.

Length 21 millim.

Hab. "India orientalis" (fide Stal).

I have not seen this species.

D Scutellum without a prominent tubercle or spine.

1274. Sycanus mermis, sp n.

Head, antennæ, rostrum, anterior lobe of pronotum, body beneath, and legs black, posterior pronotal lobe, scutellum, and hemelytra dark bronzy purplish-brown; dilated connexivum ochraceous or sanguineous, with large transverse black spots; abdomen beneath with an obscure central ochraceous fascia; head about as long as pronotum and scutellum together; first joint of antennæ about as long as anterior femora; scutellum without a distinct raised tubercle or spine; abdominal margins regularly dilated, posterior angles of the second and third segments more or less acute; second, third, fourth, and fifth abdominal segments distinctly tuberculously elevated on upper surface.

Length 24 millim.

Hab. Assam, Dunsiri Valley (Brit Mus.).

1275. Sycanus atrocyaneus, sp n

Dark indigo-black, dilated connexivum dull red with large transverse black spots; head about as long as pronotum and scutellium together; antennæ mutilated in specimen described, scutellium without a distinct raised tubercle or spine; lateral abdominal margins strongly dilated, posterior angles of the second and third segments more or less acute, second, third, fourth, and fifth segments distinctly tuberculously elevated on upper surface

Length 26 millim.

Hab Burma, Ruby Mines (Doherty).

Species of uncertain position in the specific arrangement.

1276. Sycanus ater, Wolff (Reduvius), Ic Cim. 11, p. 120, f 114 (1882)

"Antennæ five-jointed, setaceous, black, head black, with a long cylindrical collar, two spots behind eyes red; rostrum three-jointed, curved, piceous, intermediate joint longest, last shortest; pronotum black, bilobed, anterior lobe small, subglobose, smooth, shining, anteriorly on each side with a single dentation. posterior lobe subrhomboid, punctured, elevated, scabrous, angles obtuse, prominent, scutellum small, black, spine long, erect, emitted before apex; hemelytra black, shining, small; membrane resplendent fuscous, abdomen above black, shining, lateral margins prominently subangulately elevated, segments tuberculated; beneath black, margins slightly rugose, and with minute white punctures in every segment"

Length (from Wolff's figure) 29 millim. Hab "India orientalis" (Mus. Prof. Esper)

Division YOLINARIA.

In this division the lateral margins of the abdomen are strongly dilated and the lateral segmental areas more or less globosely elevated; head long and slender, longer than pronotem; second joint of rostrum considerably longer than the first; pronotum and scutellum unarmed.

Synopsis of Genera.

A Lateral dilated abdominal margins pro-

foundly sinuate at incisures

a Second joint of rostrum about half as long again as first, anteocular portion of head distinctly shorter than postocular portion

b Second joint of rostrum about twice as long as first, anteocular and postocular portion of head subequal in length

B Lateral dilated abdominal margins only slightly sinuate at incisures

Yolinus, p 357

Agriolestes, p 358

AGRIOSPHODRUS, p 359

Genus YOLINUS.

Yohnus, Amy & Serv Hem p 358 (1843); Dolin, Stett. ent Zeit xx, pp 93 & 94 (1859), Sidl, Hem Afi 111, p. 52 (1865), En Hem 11, p 11 (1874)

Type, Y sufflatus, Amy & Serv., a Javan species.

Distribution. Oriental Region.

Ovate or subovate, the lateral abdominal margins very strongly dilated, profoundly sinuated at incisures, and globosely elevated; head long, slender, almost as long as pronotum and scutellum

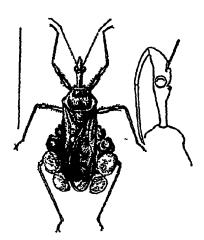


Fig 226 - Yolinus conspicuus

together; rostrum with the second joint nearly half as long again as first, which is longer than the anteocular portion of head; anteocular distinctly shorter than postocular portion, first joint of antennæ subequal in length to that of head; scutellum with the apex obtuse, rounded; femora nodulose

1277 Yolinus conspicuus, Dust A M N H (7) x1, p 212 (1903)

Black; connexivum with the fifth and sixth segments bright ochraceous; disk of abdomen beneath dull sanguineous; antennæ with the basal joint biannulated with

2 B 2

ochraceous; posterior femora narrowly and obscurely annulated

with fuscous a little before apex.

Allied to Y. baro, Stal, from Cambodia (type in Brit. Mus.), but with the pronotum broader and its posterior angles not subnodulose, connexivum much more widely dilated; body and legs distinctly greyishly pilose.

Length, 2, 24 millim.; greatest breadth of abdomen 13 millim.

Hab. Tavoy (Atkinson, Brit Mus)

Genus AGRIOLESTES.

Agriclestes, Stål, Öfv Vet.-Ak. Forh. 1866, p. 280, En. Hem 11, p. 11 (1874)

Type, A. ineptus, Stal, a Siamese species.

Distribution. Oriental Region.

Head elongate, almost as long as pronotum and scutellum together, postocular only slightly longer than anteocular portion. rostrum with the second joint about twice as long as first, which is a little longer than anteocular portion of head; pronotum transersely constricted, unarmed; scutellum transverse, posteriorly rounded; hemelytra passing the abdominal apex; abdomen on each side strongly dilated, the segmental marginal areas rounded, legs of moderate length, anterior femora a little incrassated.

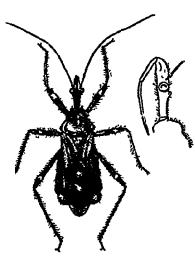


Fig 227 — Agriolestes melanopterus

1278. Agriolestes melanopterus, *Dust A M N H* (7) x1, p. 359 (1903).

Black, shining; basal joint of rostrum, head beneath and lateral margins in front of eyes, anterior lobe of pronotum (excepting black reticulate markings), subapical annulation to femora, underside of basal half of anterior femora, coxe, trochanters, apex of abdomen, and the last two segments of connexivum ochraceous or reddish-ochraceous; body and legs pilose; first joint of antennæ about as long as head. the ante- and postocular portions of which are about equal in length; abdomen on each side moderately and somewhat lobately dulated.

Length 28 millim.

Hab. Upper Burma (Bingham, Brit. Mus).

Genus AGRIOSPHODRUS.

Agriosphodrus, Stål, Öfv Vet -Ak. Forh 1866, p. 279, id. En. Hem IV, p. 11 (1874).

Type. A. dohmi. Stål

Distribution. Oriental Region

Head elongate, a little longer than pronotum, anteocular and postocular areas subequal in length; rostrum with the first joint about half the length of second and slightly longer than anteocular portion of head; first joint of antennæ about as long as head; hemelytra slightly passing abdominal apex; abdomen strongly dilated on each side, but not strongly sinuate at the incisures; legs slender, apical areas of the femora obsoletely subnodulose.

1279. Agriosphodrus dohrni, Sign (Eulyes) Ann Soc Ent. Fr. 1862, p 126. Stål (Eulyes), Ann. Soc Ent Fr. 1863, p 32. mysticus, Stål, MS.

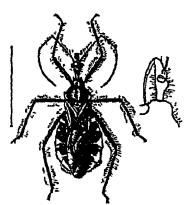


Fig 228 — Agriosphodrus dohrni,

Black, shining, pilose, lateral margins of the abdomen dilated, dull ivory-white, somewhat tinged with ochraceous, with large black segmental spots, pronotum impunctate, medially longitudinally impressed; apex of the last dilated segment more prominent in female than in male.

Length 19 to 22 millim.

Hab. Deccan (fide Stål) —
China, Shanghai (Brit. Mus)

Stal (supra) has given the dimensions as 29 to 32 millim., evidently a misprint or lapsus. A specimen also in the British

Museum is labelled in Stål's own handwriting "mystrous, Stål."

Division EUAGORASARIA.

This division includes a group of genera which have the common character of having the head armed with a spine or tubercle behind the base of each antenna; they are all more or less elongate insects, and have the lateral pronotal angles spinous, or at least prominent.

Synopsis of Genera

1 Auterior table simple, not inwardly spined	
before apex.	
A. Anterior lobe of pronotum not promi-	
neutly tuberculous on each side	
a Posterioi lobe of pronotum not discally	
spmed	
a. First joint of rostrum considerably	
shorter than second	
a'. Head with a tubercle behind	
base of each antenna	EUAGORAS, p 363
b' Head spined behind base of each	, •
antenna	Macracanthopsis,
b. First joint of rostrum longer than	[p. 362
second.	rt
a' Head shorter than pronotum	
a ² Anteocular and postocular	
areas of head about equal	
	CYDNOCORIS, p 361
b ² Postocular area of head about	Othrocogs, b our
half as long again as ante-	View a story a street in SM
ocular	VILLANOVANUS, p. 304
b'. Head about as long as pronotum	Endochus, p 365.
b Posterior lobe of pronotum discally	
spined	Drammara w 975
m. Head about as long as pronotum.	PLATERUS, p 875
b Head shorter than pronotum	
a'. Rostrum with the first joint	
equal to the remaining joints	
in length	
a ² Head spined behind the base	
of each antenna, scutellum	
posteriorly with a more or	A
less substact spine	Alcmena, p. 369
b' Rostrum with the first joint a	
little shorter than remaining	
joints together.	
b ² . Head with a tubercle behind	
base of each antenna, scu-	
tellum without a suberect	73
spine.	Epidaus, p. 371
c. Anterior and posterior lobes of pro-	
notum discally spined	
a. Ante- and postocular areas of head	
about equal in length, lateral	70
margins of abdomen dilated	Brassivola, p 373
b. Postocular longer than anteocular	
area of head, abdominal margins	70 974
not dilated	Bartacus, p 374
B Anterior lobe of pronotum prominently	T
tuberculous on each side	Isyndus, p 376
2 Anterior tibise incurved and spined before	T)
apex	Rinirbus, р 378

Genus CYDNOCORIS

Cydnocoris, Sill, Ofv Vet.-Ak. Forh. 1866, p. 274, id En Hem iv, p. 10 (1874)
Cutocoris, Sill, Ofv. Vet -Ak. Forh 1859, p 374; id. Hem Afr in, p. 53 (1865)

Type, C. gilvus, Burm.

Distribution. Oriental and Papuan Regions, and Japan

Body long; head oval, shorter than pronotum, spined on each side behind bases of antennæ, eyes somewhat prominent, area of each ocellus tuberculous; rostrum short, incrassate, first joint slightly longer than second; pronotum constricted before middle, anterior lobe centrally very strongly impressed, lateral posterior angles prominent; legs not elongated, posterior coxæ wider apart than intermediate coxæ, anterior tibiæ about as long as the femora and trochanters together.

1280 Cydnocoris gilvus, Burm (Myocoris) Tr E S 11, p. 104 (1838), Dist. A. M. N H. (7) x1, p. 245 (1903) Cydnocoris tagalicus, Q, St&l, Ofv. Vet -Ak Fork 1866, p. 274 Reduvius erythrinus, Walk. Cat Het v11, p. 200 (1873).

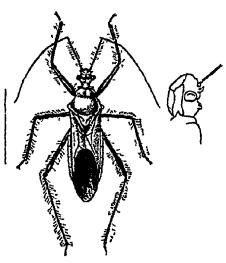


Fig 229 - Cydnocoris gilvus

Sanguineous, apex of rostrum, the antennæ, eyes and the transverse impression between them, anterior margin of pronotum, membrane, anterior and posterior areas of prosternum, meso- and metasterna (excluding lateral margins), COX® (excluding base). chanters, legs, and transverse fasciæ to abdomen beneath black; anterior spines to head curved, first joint of antennæ subequal in length to anterior femora, legs somewhat longly pilose.

Length 16 to 18 millim. Hab. Ceylon (fide Dohrn)

Burma, Bhamo, Karennee (Fea) - Sumatra, Java.

1281. Cydnocoris crocatus, Stâl, Ofv. Vet.-Al. Forl. 1866, p. 274

id En Hem. iv, p 26 (1874)

Golden-yellow, shining; antennæ, apex of rostrum, eyes and transverse fascia between them, apices of femora, bases of anterior and intermediate tibiæ, the posterior tibiæ, and the tarsi black.

membrane black or violaceous-black; first joint of antennæ about equal in length to pronotum.

Var. a. Anterior pronotal angles and two discal spots to pos-

terior pronotal lobe black.

Var. b. Anterior and intermediate legs and posterior femora unicolorous, tarsi black, a transverse spot near apex of corium black

Var. c. Resembling var. b, but with the membrane pale shining ochraceous.

Length 14 to 15 millim.

Hab. Burma; Bhamo, Karennee (Fea).

Genus MACRACANTHOPSIS.

Macracanthopsis, Reut Act Soc Sc Fenn vii, p 282 (1881)

Type, M. nodipes, Reut.

Distribution. British India and Malay Peninsula.

Head as long as pronotum, anteocular distinctly shorter than postocular area, a long erect spine on each side behind the antennal bases; first joint of rostrum very much shorter than second joint, second about as long as first and third together; first joint of antenna very slightly longer than head and pronotum together; pronotum with the anterior lobe turnid and centrally impressed,

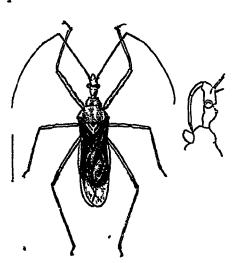


Fig 230 -Man acanthopsis nodipes.

posterior lobe centrally toveately impressed, impression not reaching the posterior margin, posterior lateral angles subprominent; scutellum with the margins and apex carnately elevate, margins of abdomen a little dilated; legs slender, anterior femora moderately incrassated and nodulose, apices of intermediate and posterior femora nodulose

1282 Macracanthopsis nodipes, Reut. Act Soc Sc Fenn. xii, p 283 (1881)

Luteous; antenna and spines behind their base,

eyes, hemelytra, apices of posterior femora, and subbasal annulations to tibiæ black; connexivum and abdomen beneath very pale stramineous, the last with a narrow sublateral black fascia; apices of tibiæ and the tarsi infuscated.

Length 10 to 10½ millim.

Hab. Darjeeling (Stockholm Mus.). Burma, Karennee (Fea) — Malay Peninsula.

Genus EUAGORAS.

Eusgoras, Burm (part) Handb. ii, p. 226 (1835), Stâl, Stett ent Zest xxu, p. 130 (1861), sd Hem Afr in, p 51 (1865), sd En Hem. 1v, p. 10 (1874) Darbanus, Amy & Serv Hém p 370 (1843), Stâl, Öfv Vet-Ak Förh 1859, p 194.

Type, E stolln, Burm, a Javan species Distribution. Oriental and Papuan Regions.

Head cylindrical, about as long as pronotum, a tubercle behind the base of each antenna, immediately behind eyes somewhat tuberculous, postocular a little longer than anteocular area; first joint of antennæ subequal in length to anterior femora, rostrum with the first much shorter than second joint; pronotum with the anterior lobe medially impressed, posterior lobe armed with a long spine near each lateral angle, abdomen beyond middle moderately ampliated, a little broader than the hemelytra; legs long, slender.

1283 Euggoras plagiatus, Burm (Zelus) Nov Act Ac Nat. Cur xvi, Suppl 1, p 303 (1834), Stål, Stætt ent Zeut xxii, p 186 (1861), id En Hem. iv, p 24 (1874).

Darbanus nigrolineatus, Amy. & Seiv Hem p 371 (1848).

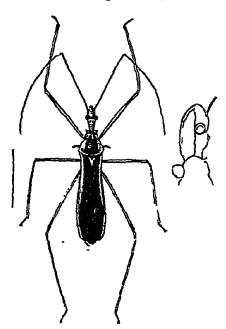


Fig 231 — Euagoras plagialus

Head, pronotum, and scutellum reddish -ochraceous; a broad central longitudinal spot to posterior pronotal lobe, the hemelytra, and sternum black; lateral margins of hemelytra, lateral margins of sternum, abdomen beneath and legs very pale luteous: femora linearly streaked with black and with a subapical black annulation; abdomen beneath with a broad black fascia on each lateral area; acetabula luteous, come reddish - ochraceous; tennæ fuscons, broadly with ochra annulated ceous; rostrum luteous, its apex black; posterior spines to pronotum curved and reflexed; first joint of antennæ as long as anterior

femora, or as the head, pronotum, and scutellum together, body above finely greyishly sericeous

Length 13 to 14 millim.

Hab. Assam; East Gáro Hills (Chemell) Bor Ghát (Dixon), Burma; Palon, Bhamo, Karennee (Fea). Tenasserim; Thaungyin

(Bungham), Meetan (Fea). Andamans; Port Blair (Meldola).— Java, Philippines.

1284. Euagoras fuscispinus, Stal (Darbanus), Ofv Vet -Al., Forh 1859, p 194; id Stett. ent. Zeit xxii, p. 135 (1861)

Flavous, testaceous, sparingly griseous-sericeous; eyes, lateral margins of head behind eyes, lateral pronotal spines, trochanters, and a broad lateral abdominal fascia on the fourth and fifth segments black; disk of posterior pronotal lobe, three or four annulations to femora, and about two basal annulations to tibiæ dark fuscous; corium sometimes fuscous, but in this case with the lateral margin and venation flavous or ochraceous; antennæ ochraceous, sometimes fuscous; rostrum with the apices of the joints fuscous; first joint of antennæ about as long as head, pronotum and scutellum together; basal joint of rostrom slightly longer than anteocular portion of head, much shorter than second joint; apices of femora subnodulose; pronotal spines long, acute. directed horizontally and a little upward

Length 12 to 131 millim Hab. Ceylon; Kandy (Green).

Genus VILLANOVANUS, LUY.

Type, V. dichrous, Stal Distributun British India.

Body elongate; head shorter than pronotum, with a prominent spine behind the base of each antenna, postocular area about half as long again as anteocular area, transversely impressed between eyes, and tuberculously elevated behind eyes: rostrum with the first joint a little longer than second, subequal to remaining

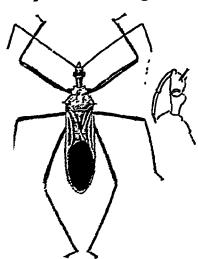


Fig. 232 - Villanocanus dichrous

two joints together; pronotum with the posterior lobe nearly as long as anterior lobe, which sculptured 15 and posteriorly medially impressed, posterior angles shortly spinons, scutellam somewhat long, its apex distinctly acuminate; legs long, anterior tibiæ a little shorter than anterior femora and moderately curved; anterior femora incrassated, shorter than posterior femora, which are as long as first joint of autennæ.

1285. Villanovanus dichrous, Stål (Endochus), Ann. Soc Ent Fr. 1863, p. 26

Sanguineous; antennæ, eyes, rostrum (excluding base), body beneath and legs black; lateral margins of sternum and abdomen and abdominal apex sauguineous; membrane shining blush black; head shorter than pronotum, which has the posterior lateral spines short.

Length 25 millim.

Hab. Sylhet (Brit. Mus) Assam; Niga Hills (Doherty).

This appears to be a somewhat local species. It was not found by Fea either in Burma or Tenasserim, and being a large conspicuously coloured insect, could not have been easily overlooked in Southern India or Ceylon

Genus ENDOCHUS.

Endochus, Stâl, Öfv Tet-Al. Forh 1859, p 194, id. Stett ent.

Zeit xxii, p 130 (1861), id Hem Afr in, p 51 (1865); id En.

Hem iv, p. 9 (1874).

Subg Pnirsus, Stâl, Öfv Vet.-Al. Forh 1859, p 364,

Type, E. nigi icornis, Stål.

Distribution. Ethiopian, Oriental, and Australasian Regions,

China and Japan

Head about as long as pronotum, cylindrical, spined on each side behind base of antenna, postocular longer, but not quite twice as long as, anteocular portion, antennæ with the first joint variable in length, either as long as head, pronotum and scutellum together, or equal to abdomen or posterior femora, rostrum with

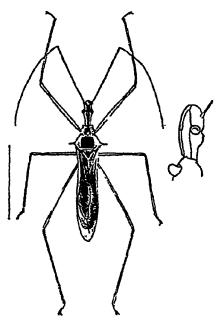


Fig. 233 —Endochus nigricornis

the first joint a little longer than the second; pronotum with the anterior lobe medially impressed, lateral angles to posterior lobe acutely spinously produced, disk of posterior lobe unarmed; scutellum with the apex usually distinctly acuminate or angulate.

A. Basal joint of antenner subequal in length to head, pronotum and scutellum together, or to anterior femora

1286. Endochus nigricornis, Stål, Oft Vet -Ak Forh 1859, p 194, Reut Act. Soc Sc Fenn p. 280 (1881)

Ochraceous or pale luteous; two central lines to posterior lobe of head

(broken in the middle), two central spots preceded by a small arcusted fascia to anterior pronotal lobe, disk of posterior lobe and

the lateral spines, disk of scutellum, corium (excepting base, base of clavus, lateral margins and veins), about seven lateral spots to sternum, stigmatal and sublateral spots to abdomen beneath, spots to coxe, under surface or vitta to intermediate and posterior femora (excluding apex), and a subapical annulation to all the femora black; posterior tibiæ more or less infuscated, head about as long as pronotum; first joint of antenne subequal in length to head, pronotum and scutellum together; anterior pronotal lobe centrally impressed at base, posterior lobe with the lateral spines produced horizontally and a little upwardly; autenna fuscous, broadly annulated with orhraceous; membrane bronzyfuscons.

Length 22 to 23 millim

Hab. Sylhet (Brst. Mus). Assam; Sibsagar. Burma, Teinzo, Karennee (Fea).—Malay Peninsula, Java

1287. Endochus cingalensis, Stall, Stett ent Zert. xx11, p (1861), 3. Endochus consors, Stal, loc. cit p 135, Reut Act Soc Sc Fenn. хи, р 280 (1881), Q.

J. Head and antennæ black, pronotum, scutellum and sternum castaneous, the first greyishly sericeous, corium dark fuscous, greyishly sericeous; head beneath, rostrum, abdomen beneath and legs luteous, the tars: and intermediate and posterior tibiæ fuscous; last three segments of abdomen beneath black; membrane dark bronzy; antennæ fuscous, annulated with ochraceous

2. Pronotum concolorous with cornum, but with the lateral spines and a transverse fascia between them black; a subapical annulation to femora, subobsolete on anterior femora, black; tibiæ luteous, abdomen beneath concolorous, excepting black lateral marginal spots.

First joint of antennæ as long as head, pronotum and scutellum together, apex of scutellum distinctly acuminate

Length 15 to 19 millim.

Hab. Ceylon (Green & Lewis). Burms; Karennee (Fea)

The eggs of this species are figured by Sharp (Cambr. Nat Hist, Insects, ii, p. 558, fig 272), with an accompanying MS note by Mr. E. E Green of Ceylon -"The eggs are attached to leaf and to each other by a viscid substance, eggs red, the coyer pale yellow, with the club white at the tip"

1288. Endochus albomaculatus, Stall, Ofv Vet-Al. Forh. 1859, p. 194.

Pale ochraceous, opaque; above and on sternum minutely speckled with greyish-white; corrum with a somewhat large white spot at inner angle near base of membrane; head above, lateral margins and spines to pronotum, basal half of lateral margin to corium, apices of first and second joints of antennæ and aper of abdomen beneath dark fuscous or black, apex of third joint of

antennæ and apical lateral margins to abdomen pale reddish; first joint of antennæ as long as head, pronotum and scutellum together; pronotal lateral spines a little upwardly curved.

Length 16 to 17 millim

Hab. Coylon; Kandy (G. sen).

1289. Endochus atrıcapillus, sp n

Golden-yellow; head above and antennæ black; intermediate and posterior tibiæ and tarsi fuscous; membrane shining bronzy, head about as long as pronotum, with a short acute spine behind base of each antenna; first antennal joint about as long as anterior femora; rostrum with the basal joint a little longer than the other two joints together; pronotum with the anterior lobe centrally impressed, posterior lobe discally unarmed, lateral spines long, acute, horizontally directed, scutellum with an apical tuberculous spine.

Length 19 millim.

Hab Sikhim, Mungphu (Atkinson, Brit. Mus.).

1290. Endochus umbrinus, sp n.

Brownish-ochraceous, above with lateral areas of sternum sericeous and minutely speckled with greyish; eyes, lateral spines to pronotum, apical half of clavus, and extreme apex of rostrum piceous or black; membrane shining bronzy; connexivum above and beneath with large obscure fuscous spots; head about as long as pronotum; first joint of antennæ subequal in length to head, pronotum and scutellum together; anterior lobe of pronotum finely centrally impressed, lateral pronotal spines long, horizontally directed, notched at base, apex of scutellum distinctly acuminate.

Length 15 millim. Hab. Bor Ghát (Dixon)

1291. Endochus carbonarius, Biedd Soc Entomol xvii, p 170 (1903)

Dull black, a narrow central line between the ocelli, the narrow posterior lateral margins and posterior angles of pronotum, underside of head, flist and second joints of rostrum, sulcation of prosternum, base of trochanters, line on inner side of anterior femora and a line on underside of posterior femora, triangular medial spots to the posterior ventral segments, and the interrupted narrow abdominal margin pale yellow; clavus and adjacent parts of corium as well as membrane obscure hyaline, third and fourth joints of antennæ rusty-red, sides of abdomen beneath greyishly tomentose, interrupted on each side by two series of smooth deep black spots, spines of antennal tubercles shortly conical, obtuse; pronotum transversely and rather strongly convex, anterior area short, scarcely half as long as posterior area which is thickly and finely wrinkled, lateral spines nearly horizontal, posterior margin

behind spines unarmed; scutellium flatly triangularly raised, and with a small impression before apex, first joint of antennæ longer than head, pronotum and scutellium together.

Length 13 millim.

Hab Assam; Khási Hills (fide Breddin).

I have not seen this species.

B Basal yout of antennæ subequal in length to abdomen, or to posterior femora.

1292 Endochus migratorius, Dist A. M. N. H (7) x1, p 246 (1903)

Pale brownish-ochraceous, in fresh specimens the head, pronotum and corium minutely spotted with cretaceous, in faded or rubbed specimens these small spots are obsolete; eyes, lateral margins and lateral spines to pronotum, and lateral margins of corium black, body beneath, legs, antennæ and rostrum pale luteous; membrane pale shining ochraceous; antennæ with the first joint about as long as abdomen, the apex of second joint black, third and fourth joints roseate, luteous at base. Lateral pronotal spines acute, distinctly directed a little backward, a central sulcate impression on posterior margin of anterior lobe, head spined at antenniferous tubercles.

Length 14 millim.

Hab Ceylon (Green & Lewis). Burma, Palon (Fea) Tenas-serim, Thagata (Fea)—China, Hongkong (Brit. Mus)

1293. Endochus merula, Dist A M N H (7) xi, p 76 (1903)

Black; two discal spots to mesosternum and a narrow lateral abdominal margin obscure brownish-ochreous, head as long as pronotum, the postocular portion considerably longer than the anteocular portion, first joint of antennæ almost as long as the abdomen; pronotum with the anterior lobe distinctly broadly foveate on posterior disk, posterior lobe transversely rugose, the lateral angles spinously produced and directed slightly backward, membrane very dark cupreous, slightly passing the abdominal apex.

Length 15½ millim.

Hab Burma; Karennee.

1294. Endochus subniger, Dist A M N H (7) M, p 76 (1903)

Black, corium, rostrum, disk of mesosternum, coxæ, and legs Iuteous, a subapical annulation to anterior femora, apices of intermediate and posterior femora, and subbasal annulation to tabæ black, head as long as pronotum, the postocular longer than the anteocular portion; first joint of antennæ about as long as the abdomen; anterior lobe of pronotum discally foveate, posterior

ALCMENA. 369

lateral angles spinously produced, abdomen and communistrongly concavely constructed at centre.

Length 14½ millim. Hab. Burma; Karennee.

1295. Endochus atrispinus, Stål, Ann Soc Ent Fr 1863, p 26

Pale greyish-strammeous legs ochraceous; an elongate central spot to anteccular portion of head, anterior tubercles, two small lateral spots and a central basal spot to anterior pronotal lobe, lateral spines to posterior lobe, basal spot to scutellium, lateral margins of prosternum, a lateral spot to mesosternum stigmatal spots, and a broken submarginal linear fascia to abdomen beneath black, inner vein to corium fuscous, head about as long as pronotum, a short strong spine behind the base of each autenna, anterior pronotal lobe foveately impressed at base, posterior lobe with the disk unaimed, lateral spines horizontally and a little upwardly produced, first joint of antennæ as long as posterior femora

Length 22 millim.

Hab India (Archd. Clerk, Bitt. Mus) - Sumatra (Brit. Mus.).

1296 Endochus inornatus, Stål, Öft Vet -Ak Fork 1866, p 270 Var , Reut Act Soc Sc Fenn xx, p 281 (1881)

Dark cmnamon-brown, posterior femora (apex excepted) and posterior tibue (base excepted) pale luteous, antennæ rufescent, third and fourth joints fuscous, apex of second joint luteous; head about as long as pronotum, a short spine behind each antenna, first joint of antennæ subequal in length to posterior femora, anterior pronotal lobe longitudinally impressed, posterior lobe finely rugulose, between the lateral spines transversely ridged, spines horizontally produced

Length 20 to 21 millim.

Hab "North India" (Brit. Mus)

Genus ALCMENA.

Alcmena, Stål, Öfv Vet-Ak. Fork 1859, pp 195 & 376 ul Stett. ent Zeit xxii, p 129 (1881), ul En Hem 11, p 10 (1874) Subgen Dalyrta, Stål, Stett. ent Zeit xxii, p 129 (1861)

Type, A angusta, Stål.

Distribution Oriental Region.

Body slender, narrowed; head slender, narrow, a little shorter than pronotum, behind each antenna armed with an acute spine, postocular area nearly or quite twice as long as anteocular area; antennæ long, first joint more than twice the length of head; rostrum with the first joint subequal in length to remaining joints together; pronotum with the anterior lobe unarmed, posterior with two discal and two lateral spines; scutellum posteriorly with a somewhat long suberect spine; abdomen equally broad as hemelytra

1297. Alcmena angusta, Stål, Öfv Vet.-Ak Forh. 1859, p 195
Alcmena spinifex, Stål (part.), En. Hem 1v, p. 24 (1874)

Fuscous black, sparingly (sternum densely) whitishly sericeous, spines of pronotum and scutellum, hemelytra, and abdomen dull flavescent-testaceous, the last with its apex fuscous, rostrum and legs pilose and pale olivaceous-green; apices of femora and tibiæ (the last slightly) and the tarsi fuscous

Length 12 millim

Hab. Ceylon (Berlin Mus.).

I have not seen this species. Stal subsequently sank it as a synonym of Ormex spinifex, Thunb.; but this I have shown to be an error (cf. p. 375)

1298 Alcmena straminipes, sp n.

Strammeous; head, pronotum, corium, and scutellum (excluding

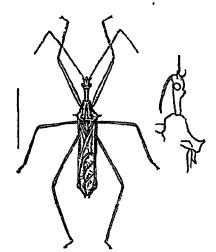


Fig 284 — Alcmena straminipes

margins and apex) ochraceous head with two large spots behind eyes, a lateral fascia on each side of anterior pronotal lobe, and the lateral spines to posterior lobe dark fuscous or black: antennæ with the first and second joints stramineous, basal area and apex of second joint fuscous: head a little shorter than pronotum, a long acute spine on each side behind base of each antenna; rostrum with the first joint much longer than second. about as long as two remaining joints together, first joint ochraceous, second stramineous, third pale castaneous; pronotum with the anterior lobe centrally impressed,

posterior lobe with two prominent discal, basal, tuberculous spines, the lateral spines acute, horizontally directed, their apices slightly recurved; scutellum with a slender oblique suberect apical spine; intermediate and posterior femora with their apices subnodulose, membrane very pale fuliginous

Length 15 millim.

Hab. Nilgiri Hills, Utakamand (Atkinson, Brit. Mus)

1299 Alcmena maculosa, sp n

Anteocular area of head, antennæ, rostrum, pronotum, scutellum, bases of hemely tra, sternum, and legs ochraceous-brown, post-

ocular area of head above black; corium blackish-brown, membrane bronzy; abdomen beneath, bases of intermediate and posterior femora, and the coxe and trochanters stramineous; pronotum and corium speckled with small greyish spots; head a little shorter than pronotum, with a short robust spine behind the base of each antenna, rostrum with the first joint subequal in length to the two remaining joints together; first joint of antenna about as long as posterior femora; pronotum with the anterior lobe sculptured, medially impressed, posterior lobe with two long erect discal and two horizontal lateral spines; scutellum posteriorly spinously produced, very slightly suberect; membrane a little passing abdominal apex.

Length 16 millim

Hab Tenasserim (Coll Dist.).

Genus EPIDAUS.

Epidaus, Stâl, Öfv Vet-Al. Forh. 1859, p 193, id Stett ent Zeit xxii, p 130 (1861); id En Hem iv, p 9 (1874) Gastroplœus, Costa, Ann Mus Zool Napoli, ii, p 140 (1864)

Type, E transversus, Burm, a species from the Philippines Distribution. Oriental and Papuan Regions, and China Head cylindrical, a little shorter than pronotum, with a spinous

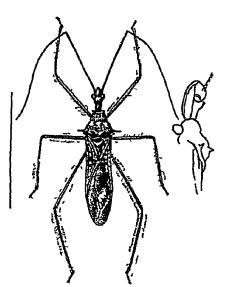


Fig 235 - Epidaus conspersus

tubercle behind the base of each antenna, postocular area nearly twice as long anteocular area; antennæ long, basal joint subequal in length to posterior femora; rostrum with the first joint shorter than the two remaining joints together; pronotum with the anterior lobe obsoletely tuberculate, posterior lobe with two discal and two long lateral spines, the last emarginate or notched near base, apex of scutellum obtusely rounded

1300. Epidaus conspersus, Stål, Ann Soc Ent Fr 1863, p 26

Obscure fuscous-testaceous, moderately seri-

ceous, antennæ, rostrum and legs a little paler in hue; body beneath blackish; three spots on anterior area of posterior pronotal lobe and three lateral spots to sternum ochraceous, sericeous; apex of scutellum, numerous small spots to corium, four small spots at each segmental incisure, and a series of sublateral spots VOL. II. to abdomen beneath ochraceous, lateral margins of abdomen beneath pale brownish-ochraceous, in the female the abdomen beneath is fuscous-testaceous, spotted as in male, head a little shorter than pronotum, behind each antenna obtusely tuberculated, anterior pronotal lobe medially impressed at base, posterior lobe with four long spines, two discal erect, two lateral horizontally directed, first joint of antennæ subequal in length to anterior temora and trochanters together.

Length 25 to 27 millim.

Hab. "Hindostan" (Clerk, Brit Mus.). Assam; Giro Hills (Chennell) Andamans; Port Blair (Meldola)

1301. Epidaus atrispinus, sp n

Pale tawny brown; abdomen beneath and legs pale luteous, head behind eyes (excluding under surface), discal and lateral spines to posterior lobe of pronotum, and scutellum (excluding extreme apex) black, rostrum and antennæ luteous; membrane pale, shining, bronzy; head scarcely longer than posterior lobe of pronotum, with a short erect tubercle behind the base of each antenna, first joint of antennæ as long as anterior femora and trochanters together; first joint of rostrum about as long as remaining joints together; anterior lobe of pronotum centrally impressed, posterior lobe with two long, erect, acute, discal, basal spines, the lateral spines long, acute, horizontally directed, and slightly recurved, body above and sternum somewhat thickly pilose, legs more longly pilose

Length 21 millim.

Hab Sikhim; Mungphu (Athinson, Brit Mus)

1302. Epidaus parvus, sp n

Ochraceous, legs, head beneath, and antennæ strammeous, spines to posterior lobe of pronotum infuscated, membrane infuscated, its apical third pale ochraceous; head shorter than pronotum, with a tubercle behind base of each antenna; basal joint of rostrum a little shorter than two remaining joints together, first joint of antennæ about as long as anterior femora; posterior lobe of pronotum with discal erect and two lateral horizontal spines, apex of scutellium not produced; membrane considerably passing abdominal apex.

Length 15 millim.

Hab. Upper Burma (Thompson)

1303. Epidaus famulus, Stål (Endochus), Ann Soc Ent. Fr 1863,p 27

Dull ochraceous; head behind eyes and a medial lateral abdominal spot black; lateral and posterior areas of pronotum, disk of scutellum, a basal spot to clavus, and a large subapical spot to corium cretaceous-white, basal joint of antennæ as long as head, pronotum, and scutellum together; anterior lobe of pronotum sculptured and medially impressed, posterior lobe with two discal

spines, the lateral spines long, horizontal, notched at base; scutellum tumid, rounded, not acuminate at apex.

Length 20 to 22 millim

Hab "North India" (Brit. Mus.) Assam; Noa Dehing and North Khasi Hills (Chennell) Burma, Ruby Mines (Coll. Dist.). Tenasserim, Mt Mooleyit (Fea).

1304. Epidaus bicolor, Dist A M N H (7) x1 p 247 (1903).

Head, pronotum, scutellum, sternum, coxæ, and anterior femora bright reddish-ochraceous; central lobe of head, antennæ, rostrum (excluding apex), corium, membrane, abdomen beneath, apices of anterior femora, anterior tibiæ and tarsi, and the intermediate and posterior legs pale luteous; eyes and apex of rostrum black, basal joint of antennæ about equal in length to head, pronotum, and scutellum together; postocular area of head a little longer than the anteocular portion; anterior lobe of pronotum centrally sulcate, posterior pronotal lobe with two somewhat long and acute tuberculous discal spines, the lateral angles also longly spinously produced, the posterior angles moderately prominent and lounded, membrane about reaching or slightly passing abdominal apex

Length 21 to 22 millim; breadth between pronotal angles

6½ millim

Hab. Malabar (Mesurier, Brit. Mus) — West China (Pratt, Coll. Dist.).

Genus BRASSIVOLA, nov.

Type, B. hystriv, Dist Distribution Ceylon.

Head elongate, a little shorter than pronotum, with a long erect

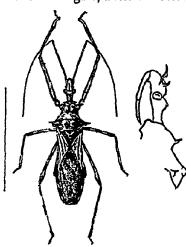


Fig 236 —Brassivola hystria

spine behind the base of each antenna, anteocular and postocular areas about equal in length, area of each ocellus distinctly tuberculous, first joint of rostium slightly longer than two remaining joints together; first joint of antennæ as long as anterior femora; pronotum with four erect discal spines, two on anterior and two on posterioi lobe, lateral posterior spines long, horizontally directed; apex of scutellum moderately acuminate; abdomen beneath gibbous and moderately centrally ridged, lateral margins moderately dilated, the fourth segment more

strongly; anterior femora somewhat strongly incrassated.

1305. Brassivola hystrix, sp n.

Pale chocolate-brown, somewhat thickly palely sericeous; antennæ broadly annulated with ochraceous; femora and thise with two central annulations, under suiface of first joint of rostrum, and marginal spots to connexivum (excluding fourth segment) ochraceous, membrane shining bionzy; posterior lobe of pronotum with scattered small ochraceous sericeous spots; head very strongly transversely impressed between eyes; scutellum obsoletely spotted with ochraceous on each lateral margin and at apex; corium very thickly palely sericeous

Length 26 millim Hab. Ceylon (Green).

Genus BARTACUS, nov.

Type, B. springer, Thunb. Distribution. India.

Allied to Brassivola in having both lobes of the pionotum discally spined, but differing by the non-dilated abdomen; postocular area of the head longer than the anteocular and narrowed behind the area of the ocelli, very strongly impressed between eyes, and with a strong erect spine before the base of each antenna; antennæ mutilated in type; anterior lobe of pronotum much shorter than posterior lobe, basal margin emarginate before scutellum, apex of scutellum moderately acuminate, legs moderately long and slender, anterior femora a little thickened and a little longer than the

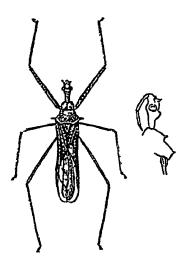


Fig 237 —Bartacus spinifes

anterior tibiæ; abdomen not dilated, membrane scarcely passing abdominal apex

1306. Bartacus spinifex, Thunb (Cimex) Nov Ins Sp 11, p 33, pl 2, fig 48 (1783), Stal (Alcmena), En Hem iv, p 24 (1874), excl syn

Fuscous - brown, sparingly (sternum densely) spotted minutely with sericeous-white, pronotal lateral spines and abdomen beneath ochraceous, intermediate and posterior legs olivaceous-green, apices of the femora narrowly, apices of the tibiæ broadly, and the tarsi brownish-ochraceous; posterior lobe of pronotum with two short

nder spines, the lateral angles produced into rather long nder spines a little directed upward, the anterior lobe with o erect discal tubercles, apex of scutellum a little produced, but thout a suberect spine

Length 17 millim.

Hab. India? (Upsala Mus.).

I am indebted to Dr. Einar Lonnberg for allowing me to figure and describe Thunberg's type. This has cleared up some con-Stål sank his Alomena angusta as a synonym of this species; but this was a mistake, as B. spinifea possesses two spines on each pronotal lobe.

Genus PLATERUS.

Platerus, Dest. A. M. N. H (7) x1, p. 247 (1903)

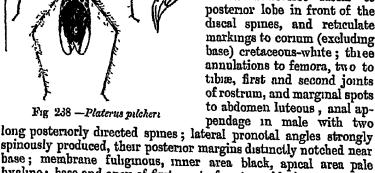
Type, P pilcheri, Dist. Distribution. Sikhim

Head long, about or almost as long as the pronotum, postocular portion a little longer and more slender than the anteocular portion, a long oblique suberect spine near the antenniferous tubercles; antennæ mutilated in type; rostrum with the first joint longer than the second; pronotum subtriangular, the anterior lobe obsoletely tuberculate, its anterior angles moderately prominent, its posterior area profoundly and broadly sulcate, posterior lobe with the lateral angles longly spinously produced, between which are two long, discal, tuberculous, erect spines; abdomen long, scarcely wider than the hemelytra, the fifth segment a little dilated on each side; legs long, anterior femora a little incrassated and longer than the tibie, intermediate and posterior femora of equal length with their tibiæ

> Allied to Epidaus, but with the spined head of Oydnocoris.

> 1307. Platerus pilcheri, Dist A M. N. H. (7) xi, p 248 (1903).

> of Black; lateral margins of anterior pronotal lobe, a waved transverse fascia to posterior lobe in front of the discal spines, and reticulate markings to corium (excluding base) cretaceous-white; thiee annulations to femora, two to tibiæ, first and second joints of rostrum, and marginal spots to abdomen luteous, anal ap-



hyaline; base and apex of first joint of rostrum black. Length (incl membr) 23; breadth between pronotal angles 7 millim

Hab Sikhim (Pilcher, Brit Mus).

Genus ISYNDUS.

Isyndus, Stil, Ofc. Vet -Ak. Förh. 1858, p. 146., id. Stett. ent. Zeit. xxii, p. 180 (1861). id. En. Hem. iv, p. 9 (1871).

Type, I. reticulatus, Stål, a Malaccan species. Distribution Oriental Region, China and Japan.

Head considerably shorter than pronotum, auteocular and postocular areas subequal in length; first joint of autenna as long as anterior femora, behind the base of each antenna tuberculous or subspinous; rostrum with the first joint a little longer than the second; pronotum with the anterior lobe armed on each side with a tuberculous spine, disk of posterior lobe unarmed, the lateral angles spinously or prominently produced; anterior tibic as long as anterior femora and trochauters together.

A. Lateral angles of posterior pronotal lobe acutely spinous.

1308. Isyndus heros. Fabr. (Zelus) Syst. Rhyna. p. 285 (1803); Stál, Men. Fabr. i, p. 101 (1868).

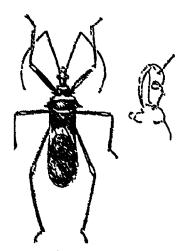


Fig 200,—Incides Ferom

Dull brownish-ochraceous; head above from behind anteune, anterior pronotal lobe (excluding anterior margin), a very broad transverse fascia and the lateral spines to posterior lobe, scutellum, clavus, about break half and apical angle of corium, membrane, antennæ, apex of rostrum and basal spots beneath first and second joints, some spots and lateral margin to prosternum, segmental incisures and a submarginal series of spots to abdomen beneath, and the legs black; apices of femora and annulations to antenna ochraceous; first joint of antenno as long as anterior femora; anterior pronotal lobe strongly tuberculously produced on each side,

lateral angles of posterior lobe straightly, acutely, spinously produced.

Var. a. Anteocular portion of head ochraceous; femora ochraceous, biannulated with black.

Var. b. Resembling var. a, but with the head altogether other come.

Length 21 to 31 millim.

Hab. Assam; North Khasi Hills (Chennell). Bor Ghat (Diaon)
Bangalore. Coylon (Green). Tennsserim; Maleucon (Fea).—
Maley Peninsula

ISYNDUS 377

1309. Isyndus pilosipes, Reut. Act. Soc & Fenn xii, p. 279 (1881)

Dark fuscous-brown; antennæ ochraceous; anterior lobe of pronotum, apices of femora, base and apex of first joint, apex of second joint, third joint (excluding base and apex), and base of fourth joint of antennæ piceous or black; legs, rostrum, and body beneath brownish-testaceous; membrane dark bronzy; abdomen beneath with a faint, central, longitudinal, darker line; first joint of antennæ as long as anterior femora; body and legs (especially body beneath) thickly ochraceously pilose; anterior pronotal lobe with a prominent tubercle on each lateral margin, lateral angles of posterior lobe straightly spinous

Length 23 to 33 millim.

Hab. Sikhim; Darjeeling (Stockholm Mus.) Assam; Nága Hills (Doherty). Burma, Karennee (Fea)

1310. Isyndus ulysses, Stal, Ann Soc. Ent. Fr. 1863, p. 28

Stramineous or very pale luteous; head above and anterior lobe of pronotum black, thickly ochraceously pilose; first and second joints of antennæ, lateral spines and posterior margins to pronotum, disk of scutellum, clavus (excluding base), lateral areas of sternum, sublateral fascia to abdomen beneath, tarsi, and the apex of rostrum piceous or black; membrane bronzy violaceous-black; first joint of antennæ about as long as anterior femora; anterior pronotal lobe with a prominent tubercle on each side, the angles of the posterior lobe longly acutely produced, with a second very short spine a little below their base.

Length 32 to 33 millim

Hab. Burma; Karennee (Fea) - Laos (Brit. Mus.).

B. Lateral angles of posterior pronotal lobe angularly prominent, but not spinous

1311 Isyndus obscurus, Dall (Harpactor) Tr. E S new ser i, p 7, pl 11, fig 4 (1850), Still, Ann Soc. Ent Fr 1863, p. 28; Reut. Rev. d'Entom vii, p 69 (1888).

Fuscous-brown, corium, rostrum, and sometimes legs brownish-ochraceous; connexivum spotted with ochraceous; antennæ with three annulations to second joint, and apex of third joint, ochraceous; membrane bronzy; first joint of antennæ as long as anterior femora; anterior lobe of pronotum with a prominent tubercle on each lateral margin, the lateral angles of the posterior lobe obtusely angulate, not spinous; body beneath thickly, shortly, ochraceously pilose, abdomen with a distinct, impressed, central, longitudinal fuscous line.

Var. Femora fuscous, the tibiæ ochraceous-brown; connexivum unspotted.

Length 22 to 26 millim.

Hab. Bhutan (Brit. Mus.). Assam; Khúsi Hills and Dunsiri Valley — Japan Tokei (Lewis)

Genus RIHIRBUS.

Rihirbus, Stal, Stett ent Zeit. xxii, p 129 (1861), id. Hem Afi ni, p 49 (1865), En Hem iv, p 9 (1874)

Type, R. trochantericus, Stal. Distribution. Oriental Region.

Head a little shorter than pronotum, with a spine behind the base of each antenna; first joint of antennæ almost as long as head, pronotum, and scutellum together; rostrum with the first joint a little longer than the other two joints together; anterior lobe of pronotum posteriorly obtusely bi-tuberculated, lateral angles of posterior lobe distinctly straightly toothed, anterior trochanters tumid; apices of the anterior tibiæ incurved and armed with a long tooth.

1312. Rihirbus trochantericus, Stâl, Stett ent Zeit xxii, p 132 (1861), id Öfv Vet-Ak Fonk 1870, p 677.
Rihirbus dentipes, Mayi, Veik z-b Ges Wien, xv, p 437 (1865)
Vars niger, scutellais, ruficeps, rufipennis, rufidorsis, tibialis, semiflavus, luctuosus, Stâl, Ofv Vet-Ak Fork 1870, p 677
Var. testaceus, Reut. Act Soc Sc Fenn xii, p 279 (1881)

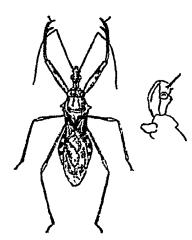


Fig. 240 -Ribirbus ti ochantei u us

"Black, sparingly greyishly senceous; head beneath and collar near middle, two basal tubercles and a spot on each side of anterior pronotal lobe, lateral and posterior margins of posterior pronotal lobe, apex of scutellum, some indeterminate spots behind middle of corium, trochanters, two obsolete and incomplete annulations to anterior femora, sternum, and abdomen pale reddish-testaceous; prosternum, large lateral spots to meso- and metasterna, and lateral fascize to abdomen heneath, anteriorly terminating m a greyish-sericeous line, black."

This is Stal's description of a typical Ceylonese specimen. The

vars. in this fauna, which I have examined, are:-

Var a Sanguneous, head (excluding base and under surface), antennæ, rostium, legs, lateral areas of meso- and metasterna, and transverse fasciæ to abdomen black; intermediate and posterior femora with a distinct ochraceous annulation.

Var. b. Luteous, a spot behind eyes, antenno, apical angles of corium, membrane, apices of femora, tibio and tarsi, apex and apical lateral margins of abdomen black.

Var. c Resembling var. b, but with the corium purplish-black, femora subapically annulated with black; connexivum spotted with black (This is the variety here figured.)

Length 18 to 24 millim.

Hab. Ceylon. Burma; Palon, Temzo, Bhamo (Fea).—Philippine Islands.

Division PANTHOUSARIA.

This division, represented, so far as my knowledge extends, by the genus *Panthous*, is proved to be extremely distinct by the structure of the pronotum, which is posteriorly dilated and covers the scutellium and base of corium.

Genus PANTHOUS.

Panthous, Still, Ann Soc Ent F. 1863, p 42, id Hem. Afr. 111, p 50 (1865); id En Hem 1v, p 8 (1874).

Type, P. avcellens, Stal

Distribution. Oriental Region.

Head oblong, unarmed; antennæ of moderate length, first joint about a third longer than the head; rostrum with the first joint a little shorter than the second, pronotum broader than the hemelytra, anterior lobe small, posterior lobe dilated and posteriorly produced over the scutellium and base of corium; legs of moderate length, subnodulose, anterior tibiæ a little longer than the anterior femora.

1313. Panthous excellens, Stal, Ann Soc Ent. Fr 1863, p 42.

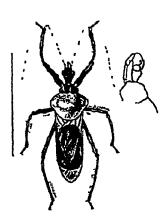


Fig 241 -Panthous excellens

Ochraceous; head above (excepting apex), antennæ, anterior lobe of pronotum, the greater part of sternum, transverse spots to lateral areas of abdomen beneath, and the legs black, rostrum (excluding apex), coxæ, trochanters, and bases of femora reddish-ochraceous; connexivum dull sanguineous, apex of corium fuscous; membrane olivaceous-black, its apex paler, femora and tibim somewhat prominently nodulose, connexivum upwardly recurved; anterior lobe of pronotum medially longitudinally impressed, posterior lobe with the posterior lateral and basal margins moderately ampliated and upwardly reflexed.

Length 24 to 29 m.lhm. Hab. Assam; Nága Hills (Dohei ty). 1314 Panthous bimaculatus, Dist A. M N. II (7) x1, p 249 (1903)

Head, pronotum, corium, rostrum, posterior and lateral margins of prosternum, coxæ, and legs dull reddish-ochraceous; antennæ, anterior margin of pronotum, a central discal spot on each corium, apex of rostrum, and body beneath black, membrane shiming, bronzy-black; base of first and sometimes also base of second joint of antennæ, extreme apex of abdomen, and lateral margins of fifth and sixth segments reddish-ochraceous or luteous, anterior pronotal lobe strongly tuberculate, excavate, and medially impressed, posterior lobe very finely transversely striate, the lateral augles broadly rounded and moderately prominent, the posterior margin strongly produced and covering the scutellum; femora moderately nodulose.

Length 20 to 22 millim., breadth between pronotal angles $5\frac{1}{2}$ to

6½ millim.

Hab. South India; Trivandrum (Atkinson, Brit Mus.), Canara (Coll. Dist.).

Division CORANUSARIA.

The genus Coranus represents a distinct group of the Harpactorine in which the antenne are short and the first joint not longer than the head; the lateral angles of the pronotum are unarmed, the scutellum has no discoidal tubercle, but has a longitudinal carination, which in some cases is produced in a suberect process or spine.

Genus CORANUS.

Coranus, Curtis, Bit Ent. x, pl. 453 (1833), Still, Hem Afi III, pp 49 & 93 (1865), id En Hem IV, p. 8 (1874), Reut Öfv. Vet.-Al. Forh 1872, No 6, p 61
Colliocoris, Hahn, Wanz II, p 23 (1834), Fieb Ew Hem pp 42 & 154 (1861).

Type, C. subapterus, de Geer, a Palæarctic species.

Distribution. Palearctic, Ethiopian, Oriental, and Australasian

Regions.

Body oblongly ovate; head robust, oblong, antennæ short, first joint as long as the head or a little shorter; rostrum with the first and second joints variable in length; pronotum unarmed, constricted before middle, scutellum with a medial carination sometimes produced in an elevated suberect process or spine, mesosternum anteriorly provided with a small marginal tubercle, abdomen on each side moderately ampliated; legs of moderate length, anterior femora a little incrassated.

A. Scutellum with an erect conscal tube culous spine

1315. Coranus spiniscutis, Reut Act Soc. Sc Fenn. xii, p. 275 (1881)

Testaceous-fuscous, shortly greyishly sericeous and pilose; head black, postocular area with a central linear testaceous line; antennæ brownish-ochraceous, first joint (excepting apex) and base

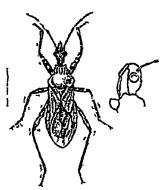


Fig 242 - Coranus speniscules

of second joint luteous; comming fuscous, membrane bronzy-fuscous, connexivum ochraceous, spotted with fuscous, abdomen beneath ochraceous, its apex piceous; legs ochraceous, annulations to femora, bases and apices to tibiæ, and apices of tarsi piceous, extreme bases of tibiæ with a pale annulation. first joint of antennæ distinctly shorter than head, scutellum with an erect conical tuberculous spine; hist joint of rostrum shorter than second.

Length 9 to 10 millim.

Hab Assam; North Khási Hills (Chennell) Ranchi (Irvine). Bor

Ghát (Dixon) Burma, Palon, Bhamo, Karennee (Fea).

1316. Coranus fuscipennis, Reut Act Soc Sc Fenn x11,p 275 (1881)

Black, very sparingly greyishly sericeous or pilose; postocular area of head with a central pale longitudinal line; antennæ piceous, first joint (excepting apex) luteous; corium very pale ochraceous, ferruginous on apical area, clavus and membrane brassy-black; abdomen beneath black, with some pale sublateral testaceous markings on each side, connexivum above and beneath pale testaceous with transverse piceous spots; femora nodulose, totally black or very obscurely annulated with ferruginous, tibue and tarsi black, more or less widely annulated with pale testaceous near base and apex, first joint of antennæ almost as long as head; first joint of rostrum shorter than second, posterior lobe of pronotum densely and strongly granulate, scutellum with an erect conical tuberculous spine

Length 9 to 10 millim.

Hab Bor Ghat (Diaon) -Sumatra (fide Renter).

1317. Coranus obscurus, Kuby (Harpacton), J Linn. Soc., Zool xxiv, p 120 (1891) Dist A. M. N. H. (7) x1, p 249 (1903) Coranus loczyi, Hori. Termész. Fizetek, xv, p 185 (1892)

Piccous, densely greyishly sericeous and pilose; membrane shining bronzy-black, postocular area of head with a central pale

line; autennæ piceous, basal joint (excepting base and apex) ochraceous, tibiæ ochraceous, with basal, medial, and apical piceous annulations; connexivum ochraceous, broadly spotted with black, first joint of antennæ almost as long as head; first joint of rostrum shorter than second; posterior pronotal lobe thickly and coarsely granulate; scutellum with a short erect tuberculous spiny tubercle

Length 9 to 10 millim.

Hab. Sikhim Assam, Núga Hills (Chennell) Calcutta (fide Horvath). Ceylon (Green) Burma, Palon (Fea)

B. Scutellum without an erect conreal spine or tubercle.

1318. Coranus atricapillus, Dist. A. M. N H (7) x1, p 77 (1903)

Head, anterior lobe of pronotum, scutellum, membrane, and prosternum black; posterior lobe of pronotum, corium, and body beneath pale castaneous; connexivum above and beneath black, spotted with luteous, legs luteous, femora annulated with piceous, bases and apices of tibes and tarsi (excluding base) piceous, antennæ piceous, basal joint (excluding base and apex) luteous; rostrum luteous, with its apex piceous, femora moderately nodulose, head strongly transversely impressed between eyes; scutellum with carination non-erect, anterior lobe of pronotum deeply centrally sulcate; lateral pronotal angles rounded, subprominent, basal margin concave

Length 81 millim.

Hab Ceylon (Lewis); Pundaluoya (Green).

Species unknown to writer.

1319 Coranus wolffi, Leth & Sev Cat Gén Hém. 11, p 190 (1896), nom n Reduvius ægyptius, Wolff, Ic Cim. 11, p 83, fig. 80 (1801), nom

Body small, greyishly villose; antennæ four-jointed, griseous, apex fuscous; head porrect, griseous, posteriorly fuscous with a medial pale line; rostrum fuscous, its apex black, pronotum griseously punctate, anterior lobe obscurely bituberculate, with a medial pale line; scutellum fuscous, apex obtusely subreflexed, corium griseous, unspotted, membrane black; abdomen above red, its apex black, connexivum griseous with five black spots, abdomen beneath griseous, unspotted, on each side with a punctured linear impression; legs unarmed, griseous variegated with fuscous, tibiæ with whitish basal annulations.

Length of Wolff's fig. 7½ millim Hab. "India orientalis"

Division PRISTHESANCUSARIA

Basal joint of antennæ distinctly longer than the head; lateral pronotal angles more or less spinously produced, the anterior lobe provided with two prominent discal tubercles, the basal angles more or less tuberculously or lobately produced, scutellum with a distinct discal tubercle or erect process

Only one genus representing the division is at present known

in the fauna of British India

Genus PRISTHESANCUS

Pristhesancus, Amy & Serv Hém. p 360 (1843) Stål, Stett ent Zeit xxii, p 131 (1861), id Ofv Vet-Al. Forh 1870, p 676; id En Hem iv, p 7 (1874)

Type, P. do yous, Boisd, from the Papuan Islands Distribution Oriental and Australasian Regions

Body somewhat broadly subelongate; head elongate, shorter than pronotum, the postocular longer than the anteocular portion, first joint of rostrum much shorter than second, head behind antennæ distinctly tuberculated, first joint of antennæ much longer than head, about as long as anterior femora; anterior lobe of pronotum with two prominent discal tubercles, posterior lobe with the lateral angles spinously, and the hind angles more or less tuberculously or lobately produced; scutellum with the disk distinctly, tuberculously, erectly produced, abdomen ampliated and reflexed on each side; legs of moderate length, anterior tibire almost equal in length to anterior femora.

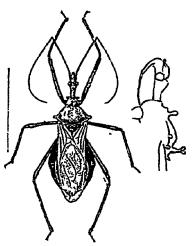


Fig 213 -Pristhesances zetterstulte

I am indebted to Dr Yngve Sjostedt for affording me an opportunity to figure this species.

1320 Pristhesancus zetterstedti, Stål, Öfc Tet-Al Forh 1859, p 376, id Stett ent Zeit xxxxxxxxx p 134 (1861), id En Hem 1v, p 17 (1874)

Black; head, pronotum, scutellum, sternum and coxte purplish; bases of third and fourth joints of antenna luteous, hemelytra testaceousflavescent, membrane obscure hyaline, abdomen violaceousblack; discoidal process to scutellum strongly elevated. obtusely bi-tuberculously spinous, abdomen strongly ampliated, its margins angularly undulated,

Length, 🗜 19 millim Hab "North India" (Stockholm Mus.)

Division POLIDIDUSARIA

In this division the anterior femora are granulate, generally nodose or nodulose, and always spinous, it is in fact in the spinous condition of the legs, and generally also of the body, that the principal divisional characteristics are found.

Synopsis of Genera

A Head with the central lobe not spinously produced

a First and second joints of lostrum subequal in length

b First joint of rostrum longer than second
a Postocular area of head much longer
than anteocular, anterior femora
spined

Postocular area a little longer than anteocular, all the femora spined.

B Head with the central lobe longly, spinously produced

SCIPINIA, p 384

Іпантна, р 385

Polididus, p 386

Henricohahnia, p 387.

Genus SCIPINIA.

Scipinia, Stål, Stett. ent Zeit xxii, pp 137 & 138 (1861). id Ln Hem iv, p 6 (1874)

Type, S horrida, Stall

Distribution Oriental and Australasian Regions.

Body subelongate, head above with three long spines on each side and with a number of small obscure spines or spinules between or around them; rostrum with the first and second joints equal in length; first joint of antennæ very slightly longer than head; anterior lobe of pronotum with four long and a number of smaller spines, posterior lobe unarmed, lateral angles a little upwardly directed mesosternum with a small tubercle on each side; anterior

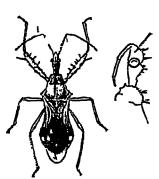


Fig 244 - Scipinia horrida

femora moderately incrassated, nodulose, with a long spine above near apex, and with a double series of spines beneath; anterior femora and tibiæ nearly equally long, the last on each side very obsoletely spinulose

1321. Scipinia horrida, Sill (Sinea), Freg Eug Resa, Ins p 262 (1859), id En Hem iv, p 15 (1874) Sinea peltastes, Dohrn, Stett ent Zeit xxi, p 406 (1860)

Ochraceous; base of head above and spots to connexivum, the largest on fourth and fifth segments, black,

membrane bronzy, its apical area palei, subhyaline; clavus fuscous,

posterior lobe of pronotum granulate, its lateral angles acute, intermediate and posterior femora subnodulose near apices; abdomen in female dilated, especially at fourth and fifth segments

Length 10 millim

Hab. Sikhim (Atkinson, Brit Mus) Ceylon Burma, Karennee (Fia).—Philippines

Genus IRANTHA

Inantha, Stall, Stett ent. Zert xvn, p 137 (1861), id En Hem iv, p 6 (1874)

Type, I armipes, Stall

Distribution Oriental and Papuan Regions.

Body elongate; head subequal in length to pronotum, armed above with three double series of long spines, the two anterior longest, and behind these smaller scattered spines or spinules, narrowed behind eyes, with two small spines near base, first joint of antenne a little longer than head; rostrum with the first joint a third longer than second; anterior lobe of pronotum with numerous minute acute tubercles and with four rather long spines, posterior lobe unarmed, the lateral angles spinously acute, mesosternum minutely tuberculate on each side, legs of moderate length, anterior femora moderately incrassated, nodose, spinous, the spines beneath

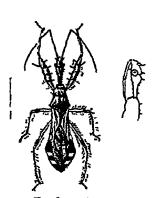


Fig 245 —Irantha armipes, ♀ `

and the subapical one above longest; auterior tibiæ shorter than anterior femora and beneath on each side obsoletely densely spinulose.

1322. Irantha armipes, Stål (Harpactor), Öfv Vet-Ak Föih 1855, p 189, id Stett ent Zeit xxii, p 138 (1861).
Sinea hophtes, Dohrn, Stett ent Zeit xxi, p 406 (1860)

Brownish-ochiaceous, first joint of autennæ annulated with fuscous; head piceous, membrane bronzy, connexivum broadly transversely spotted with black, most broadly on the fourth and fifth segments; meso- and metasterna and abdomen beneath broadly

laterally infuscated; intermediate and posterior legs pale ochraceous, bases of femora and bases and apices of tibize a little darker; posterior lobe of pronotum granulate, abdomen in female dilated on each side, especially at fourth and fifth segments: lateral spines to posterior pronotal lobe finely spinously produced in male, shorter and more broadly so in female.

Length 10 millim.

Hab Ceylon (Green)

1323 Irantha consobrina, sp n

Allied to I armipes, but much paler in hue, ochraceous, head fuscous, spines to head and anterior lobe of pronotum very much longer; lateral abdominal margins at fourth and fifth segments angularly produced the lateral posterior pronotal angles more angularly produced than in the corresponding sex of I armipes.

Length 10 millim

Hab Nilgiri Hills (Hampson)

Genus POLIDIDUS.

Polididus, Stal, Ofi Vit.-Ak. Fork. 1858, p. 448, En Hem. w, p 6 (1874).

Type, P spinosissimus, Stal, an Ethiopian species.

Distribution. Oriental, Ethiopian, and Australasian Regions; also found in China.

Body moderately elongate: femora, head above and beneath, pronotum, scutellum, and abdominal margins spinose, scutellum with three spines; margins of abdomen thickly spinulose, the spines at angles of segments longest; head with the postocular a little longer than the anteocular area; cellular areas of the membrane elongated; first joint of antenno and anterior femora subequal in length; first joint of rostium distinctly longer than the second, first joint longer than anteocular portion of head

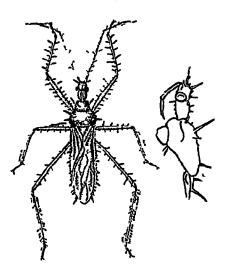


Fig 246 -Polididus ai malissimus

1324 Polididus armatissimus, Stal, Ofr Vet -Ak Fork 1859,p 376

Pale brownish-ochraceous, abdomen beneath with a piceous sublateral fascia on each side sternum infuscated and greyishly

pilose; anterior pronotal lobe with grevish narrow vitte, head with a long spine behind the base of each antenna and with a number of smaller discal spines; pronotum spinous, the longest spines being two erect on anterior lobe and the lateral spines to posterior lobe; anterior tibiæ spinous, intermediate and posterior tibiæ spinulose; femora strongly spinous.

Length 10 millim.

Hab Calcutta and Bombay (Brit Mus) Bor Ghát (Dixon) Ceylon (Green) Burma; Rangoon (Fea), Moulmein (Fea).—Philippines (Stockholm Mus). China Japan (Lewis).

Genus HENRICOHAHNIA.

Henricohahma, Bredd Deutsche ent. Zeit p 184 (1900). Forestus, Dist A. M N H (7) xi, p. 251 (1903).

Type, H. walinschaffei, Bredd., a Javan species.

Distribution. Oriental Region.

Body oblong-ovate; head elongate, central lobe prominent and spinously anteriorly produced, postocular portion longer than anteocular, rostrum with the first joint short, about reaching eyes, second joint twice as long as first, antennæ short, setose, first joint moderately incrassate, about as long as postocular portion of head, second and third joints subequal in length, fourth shortest, pronotum transversely constricted before middle, disk more or less bicarinate, posterior lateral angles more or less prominent; scutellum small, the apex prominent; abdomen more or less lobately produced and distinctly centrally sulcated, femora generally granulous or spinous

A Lateral pronotal angles broadly produced, their apices notched or spinous

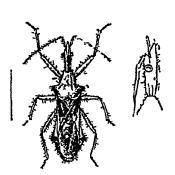


Fig 247 —Henricohakma
typica

1325 Henricohahnia typica, *Dist* (Forestus) *A. M N H* (7) xi, p 251 (1903)

Ochraceous; corrum (excluding apical area), membrane, a large spot on fourth and fifth segments of connexium, base of rostrum, and basal and apical joints of antennæ brownish - ochraceous; a lateral fascia to meso- and metanota, anal appendage (excluding apex), and some minute spots to abdomen piceous Antennæ longly setose; pronotum with two discal curved and with two other much more

obscure carinæ near lateral angles, lateral margins with a series vol. II 2 1)

of short robust spines, lateral angles somewhat broadly produced, their apices subtruncate and armed with three spines, their anterior margins also shortly spinous, their posterior margins roundly and centrally concavely notched; connexivum at fourth segment angulately produced, at fifth segment slightly produced, lateral abdominal margins finely spinous and setose, femora coarsely granulate and setose, anterior tibic and femora spined beneath, abdomen beneath centrally sulcate, the sulcation with a fine central ridge.

Length 12½-14; breadth between pronotal angles 3½-4 millim. Hab. Sikhim; Mungphu (Atkinson, Brit. Mus.) Assam; North

Khási Hills (Chennell)

B. Lateral pronotal angles spinously produced and recurved.

1326. Henricohahnia montana, *Dist* (Forestus) A. M. N. H. (7) xi, p 252 (1903)

3. Piceous-brown. a spot between eyes and central line to postocular portion of head, central sulcation to anterior lobe of pronotum, clavus, a spot on apical margin of cornum, spots to connexivum, iostrum (excluding apex), and legs, more or less distinctly, ochraceous, in other specimens some of these pale markings become obliterated; body beneath pale brownish, grayishly pilose, the anal appendages piceous; tibiæ annulated with luteous.

Much paler above, the pale spot to corrum occupying the

whole apical angle

Allied to the preceding species (II typica), but differing by the pronotal lateral angles, which are spinous and strongly recurved, the fourth and fifth segments of the connextum are much less produced, the lateral abdominal margins finely spinous, but much less setose, anterior tibis not spined beneath.

Length, 513, 216, breadth between pronotal angles, 54, 243

millim.

Hab Sikhım, Mungphu (Atkınson, Brit. Mus) Assam, Khúsi Hills (Chennell)

1327 Henricohahma spinosa, *Dist.* (Forestus) *A. M. N. H.* (7) xi, p. 252 (1903)

Luteous; a streak on each side of central lobe on anteocular portion of head, a broad central longitudinal fascia on postocular portion, clavus (excluding base), and a large spot on fourth and fifth segments of connexivum piecous; membrane pale cupreous.

Allied to *H. montana* by the spinously recurved lateral pronotal angles, but resembling *H. typica* in the angulately produced fourth and fifth segments of the connexivum and the very longly spined under surfaces of the anterior femora and tibim; the upper surfaces of all the femora are also more shortly spinous, the carine

to the pronotum are less pronounced than in either of the two preceding species

Length, 9, 14; breadth between pronotal angles 4 millim.

Hab. Sikhim (Atkinson, Brit. Mus.).

C. Later al pronotal angles subprominent, not spinous

1328 Henricohahma inermis, *Dist* (Forestus) A. M. N. H. (7) al, p. 258 (1903)

Pale brownish-ochraceous, sparsely greyishly pilose; connexivum spotted with luteous, membrane cupreous; third joint of antennæ (excluding apex) and base of fourth joint luteous. Pronotum with two discal somewhat indistinct carinæ, much more distinct on anterior lobe, where there are altogether five carinæ, none on posterior lobe near lateral angles, which are only subprominent and not spinous, connexivum pioduced, but not angulated; legs unarmed, excepting the anterior femora, which have a series of spines beneath.

Length 13; breadth between pronotal angles 3 millim. Hab. Sikhim (Coll. Dist.), Mungplu (Atlinson, Brit. Mus.).

1329 Henricohahnia gallus, sp n

Fuscous or brownsh-ochraceous, head, anterior lobe of pronotum, and legs a little darker; antennæ unicolorous; rostrum luteous, its apex and base of second joint beneath black; body above finely pilose, lateral margins of head and pronotum, the antennæ and legs longly pilose, two central carinæ occupying disks of both lobes, the lateral angles not or subprominent, the lateral margins and anterior lobe sparingly spinulose; connexivum slightly produced and distinctly angulated, somewhat minutely spotted with ochraceous near the incisures; membrane bronzy; femora coarsely granulate and spinulose and with the anterior tibiæ spined beneath.

Length 94 millim.

Hab Nılgırı Hılls; Kotagırı (Brit. Mus)

Subfamily XII. NABIDINÆ.

This subfamily is easily distinguished from the other similar divisions of the Reduvindæ by having the rostrum four-jointed, the basal joint being short and usually stout. Some writers have followed the great authority of Stål in regarding the group as constituting a distinct family, but the general opinion of those who have studied the Order is that the Nabidinæ can only be treated as a subfamily of Reduvindæ This subfamily is almost universally represented, although comprising only a limited number of genera and species.

Division PACHYNOMARIA

Pachynomina, Stal, En Hem 111, p 106 (1873).

This division, representing one of the three subfamilies proposed by Stal, contains but a single genus, which is somewhat widely

distributed in what is generally known as the Old World

The pronotum is without an anterior collar; the head is immersed to the eyes, or, in other words, the eyes touch the anterior margin of the pronotum, the rostrum is short and incressated, ocelli are absent, and the anterior femora are very strongly increaseated

Genus PACHYNOMUS.

Pachynomus, Klug, Symb Phys 11 (1830), Lap Ess Hem p. 81 (1832), Burm Handb. ii, p. 222 (1835), Stål, En Hem. 11, p. 107 (1873).

Subg Punctius, Stal, En Hem in, p 107 (1873)

Type, P picipes, Klug, a Southern Palearctic species.

Distribution South-eastern Palwarctic, Ethnopian, and Oriental Regions

Rostrum short, incressated, second joint slightly shorter than third, ocelli absent, first joint of antenne short; pronotum

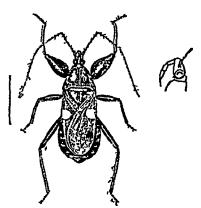


Fig 248 -Pachynomus biguttatus

short, on each side a little emarginate transversely impressed near base, basal maigin before scutellium broadly sinuate; scutellium large, metasternum distinctly longitudinally carmate, anterior temora very strongly incrassated, anterior tibiæ curved, and provided with a minute apical spongy furiow, head immersed, the eyes about touching anterior maigin of pronotum

1330 Pachynomus biguttatus, Stål, Ann. Soc Ent Fr 1863. p 58

Black; a large counded apical

spot to corrum ochraceous, antennæ, tibiæ and tarsi pale piceous, antennæ finely hirsute, basal joint short, incrassate, second and third joints subequal, pionotum smooth, distinctly centrally longitudinally impressed, transverse impression strongly punctate; scutellum smooth, with a distinct, medial, oblong cluster of punctures, corrum densely, finely, rugosely punctate: membrane not reaching abdominal apex.

Length 9 to 13 millim.

Hab Darjeeling (Coll. Dist.). North Bengal (Campbell, Brit. Mus); Murshidabad

1331. Pachynomus alutaceus, Stâl (Punctius), Oft Vet-Al. Forh 1858, p 442, id En Hem in, p 107 (1873)

Black, opaque, densely punctate and granulate; rostrum, anterior tibiæ and tarsi, and the posterior legs piceous; internal angle of the corium obtuse; anterior pronotal lobe with a distinct longitudinal impression, somewhat variously punctured, posterior lobe minutely granulate, scutellum with a longitudinal medial rugosity, posteriorly evanescent, and on each side an obsolete similar rugosity; corium very densely and minutely rugulosely granulate, the veins elevated abdomen beneath minutely granulate.

Length, 3,7 millim. Hab. Tranquebar

I have not seen this species

Division PROSTEMMARIA.

Nabma, Stal, En Hem m, p 106 (1873).

Stal's name cannot be employed for this division, as he used Prostemma as a synonym for Nabis.

As in the previous division, the pronotum is not nairowed and developed anteriorly into a distinct collar, the head is usually, but not invariably, immersed to the eyes, which touch the anterior margin of the pronotum, the rostium is longer, third joint extending to beyond base of head; ocelli present.

Synopsis of Genera.

A Head immersed to eyes, which about touch anterior margin of pronotum

a. Second joint of autenna not incrassated

a Second joint of rostium shorter than third

b Second joint of rostium longer than third

a' Anterior femora with a dentate ampliation beneath

b First and second joints of antennæ incrassated .

B. Head not immersed to eyes, which are well separated from anterior margin of pronotum...

Риостемма, р 392

ALLCORHYNCHUS, p 393

Psilistus, p 395

PHORTICUS, p 395

RULANDUS, p 396.

Genus PROSTEMMA.

Prostemma, Lap Ess Hem p 15 (1832), Burm Handb ii, p 241 (1835); Stein, Beil ent Zeitschr. 1, p 86 (1857)
Postemma, L Dufour, Ann Soc Ent F. 1834, p. 349
Metastemma, Anny & Serv Hém p 327 (1843), Freb Eur Hem pp 43 & 157 (1861); Stäl, Hem Afi iii, p 39 (1865)
Nabis, Latr (part) Gen. iii, p 127 (1807), Stäl, En Hem iii, p. 107 (1873)
Subg Poccilta, Stäl, En Hem. iii, p 108 (1873)
, Scelotrichia, Reut. Rev d'Ent ix, p 291 (1890)

Type, P guttula, Fabr., a Palæarctic species
Distribution. Palæarctic, Ethiopian, and Oriental Regions

Body oblong or subelongate, narrowed anteriorly, head before eyes subconically produced, posterior margin of eyes touching anterior margin of pronotum, ocelli present; antennæ finely hirsute, first joint short, not or only just passing apex of head, rostrum longer than head; pronotum longer than broad, or about as long as broad, transversely constricted behind middle, base slightly sinuate, scutellum subequilateral, hemelytra complete or sometimes abbreviated; legs of moderate length, anterior femora moderately incrassated, beneath densely spinulose; anterior tibiæ shorter than the femora, incrassated at apices, the apex obliquely truncate and provided with an apical spongy furrow

1332. Prostemma carduelis, Dohrn, Stett ent Zeit xix, p 229, pl 1, fig 8 (1858), Stål (Pœcilta), En Hem 111, p 108 (1873), Dist A M N H (7) xi, p 253 (1903)
 Prostemma placens, Walk Cat. Het vii, p 137 (1873)

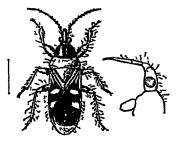


Fig. 249 —Prostemma cardue!

Black; posterior lobe of pronotum, scutellum, clavus, and base of corium pale sanguineous or testaceous, a transverse spot near centre of corium, another near its apex, and apex of membrane greyish-white; apices of anterior femora, and bases and apices of remaining femora, tibiæ, and tarsi ochraceous, the tibiæ sometimes brownish-ochraceous; posterior lobe of pronotum with scattered

coarse punctures; lateral margins of body and the legs longly hursute; antennæ more shortly hursute

Length 8 millim.

Hab Ceylon (Green). Burma; Palon, Bhamo, Pegu (Fea).

1333. Prostemma flavomaculatum, Leth Ann Mus Civ. Gen. 1883, p 649

Shining black, head and pronotum olivaceous-black, outer basal margin of clavus, basal and a submedial, transverse, somewhat rounded spot to corium ochraceous; legs luteous, the femora very obsoletely and obscurely annulated with fuscous; apical spot to corium and apex of membrane white, abdomen with the first four segments above and beneath red, sometimes black and concolorous; antennæ brownish-ochraceous, anterior femora incrassated, nearly totally spinulose beneath.

Length 6 millim.

Hab. Burma; Minhla (Comotto).

Genus ALLŒORHYNCHUS.

Allocorhynchus, Fieb Eur Hem p 43 (1861), Stâl, Hem Afi 111, p 40 (1865), id En Hem. 111, p 107 (1873)

Type, A flavipes, Fieb., a Palæarctic species.

Distribution Palmarctic, Ethiopian, Oriental, Australasian, Ne-

arctic, and Neotropical Regions.

Body orately oblong; head before eyes shortly, somewhat concally produced, posterior margin of eyes touching anterior margin of pronotum, ocelli present; antennæ pilose, first joint short and passing apex of head; rostrum reaching the metasternum, slender, first joint short, incrassate, second and third longest, pronotum constricted behind middle, base truncate, scutellum almost equilateral; legs of moderate length, anterior femora moderately



Fig 250 —Allworhynchus unulus

incrassated, beneath medially obtusely, somewhat dentately ampliated, beyond dentation minutely serrate; anterior tibiæ slightly shorter than anterior femora, apex incrassated and provided with a spongy furrow.

1334 Allworhynchus vinulus, Stål, Ann Soc Ent Fr 1864, p. 59 Allworhynchus pulchellus, Stål, Öfv Vet-Al, Forh 1870, p 675

Luteous, sparingly pilose; body beneath, with legs and rostrum, stramineous; head, posterior lobe of

pronotum, scutellum, clavus, interior margin of corium (broadened at apex), meso- and metasterna, and apical area of abdomen,

the last somewhat arcuately continued on each side to lateral margin, black, membrane and apex of second joint of antennæ fuscous.

Length 5½ to 6 millim.

Hab Bor Ghát (Dixon) Burma; Palon, Maudalay (Fea).— Java (Helsingfors Mus.).

1335 Alleorhynchus marginalis, Dist Entomol xxxvi, p. 1 (1903).

Head, pronotum, scutellum, and sternum piceous, shining; a lateral spot on each side of scutellum and the corium brownish-piceous; a spot near apical margin of corium and its apical angle ochraceous, membrane pale piceous, its basal angle narrowly ochraceous, connexivum above and beneath ochraceous, spotted with piceous; abdomen beneath castaneous; legs, rostrum, and antennæ ochraceous, apices of femora and bases of tibiæ brownish-ochraceous; second and fourth joints of antennæ about equal in length, third a little longer than first; body above finely pilose; anterior and intermediate femora thickly and finely spinous beneath, anterior tibiæ distinctly clavate at apices.

Length 7 millim

Hab Burma; Katha (Fea)

1336. Alleorhynchus nietneri, Stein, Beil. ent Zeitschi xxii, p. 382 (1878).

Black, shining, pubescent; pronotum black, shining; scutellum opaquely black; corium and clavus black, at the margin of the last a long narrow flavous spot, membrane fuliginous; coxe and legs flavous, femora yellow, apices of anterior tibiæ fuscous, abdomen beneath with the base piceous, apex black, shining; abdomen above with the base medially reddish-yellow, apex black, shining, basal margin narrowly flavous, second segment above with a medial coarsely punctate space.

Length 5½ millim

Hab. Ceylon (Nietner)

I have not seen this species.

1337. Allconhynchus bengalensis, sp n

Testaceous; head (excluding apex), two bload central longitudinal fasciæ to pronotum, not extending much more than half-way from base, scutellum, three spots to corium—one near base, one at apex, and the third at inner angle,—membrane and meso-and metasterna black, rostrum, coxæ and legs luteous, body finely pilose, antennæ mutlated in the two specimens described; anterior femora strongly incrassated and dentately ampliated beneath

Length 5 millim.

Hab. Bengal, Ranchi.

Genus PSILISTUS.

Pallistus, Stal, En. Hem iii, p 107 (1873); Reut Rev d'Ent ix, p. 290 (1890)

Type, P. corallinus, Stal.

Distribution. Oriental Region.

Allied to Alloorhynchus, but the anterior and intermediate femora beneath very thickly spinulose, the anterior femora not dentately ampliated beneath; pronotum medially constricted; anterior tibiæ provided with a small spongy furrow, but the intermediate tibiæ without it, and distinctly curved.

1338. Psilistus corallinus, Stål, En Hem 111, p. 109 (1873)

Coral-red, shining, sparingly setose; scutellium, clavus, and internal area of the corium fuscous—in some specimens these areas are coral-red and concolorous; membrane piecous, antennæ fuscous,

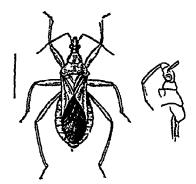


Fig 251 -Psilistus corallinus

basal joint red and passing apex of head; connexivum ampliated; the serration to the under surfaces of the anterior and intermediate femora black; membrane not quite reaching abdominal apex

. Length 9½ to 11 millim.

Hab. Sikhim. Burma; Karennee (Fea). Tenasserim; Plapoo (Fea).—Malay Peninsula, Borneo.

Genus PHORTICUS.

Phorticus, Stål, Bud till Rio-Jan Hem 1, p 69 (1858), id En Hem 111, p 107 (1873), Reut Rev d'Ent 112, p 290 (1890); id Wien. ent Zeit mi, p 317 (1893)

Type, P. vidius, Stal, a Neotropical species
Distribution. Nearctic, Neotropical, Southern Palæarctic, Ethiopian, and Oriental Regions

Body small, subelongate, head before eyes cylindrically produced, eyes almost touching anterior margin of pronotum; rostrum long, reaching middle of mesosternum; first joint of antennæ passing apex of head, both first and second joints incrassated, pronotum anteriorly narrowed, medially constricted, near anterior margin obsoletely, obtusely impressed, and provided with an obsolete collar, scutellum triangular, equilateral, legs of moderate but variable length, anterior femora incrassated, anterior tibiæ with their apices incrassated

1339 Phorticus cingalensis, Dist Entomol xxxvi, p 2 (1903)



Fig 252.
Phorticus congalensis

Head, scutellum, sternum, and membrane piceous, pronotum and corium dull castaneous; anterior margin of pronotum, a basal spot to clavus and corium, connexivum, posterior margin of prosternum, abdomen, legs and rostrum luteous; antennæ brownishochraceous, base and apex of third joint luteous; basal joint of antennæ passing apex of head, first and second joints incrassate, pronotum faintly transversely constricted, membrane slightly passing abdominal apex, its apical margin narrowly fuliginous; body distinctly pilose

Length 2\frac{2}{3} millim

Hab Ceylon (Lewis)

Genus RULANDUS, nov.

Type, R phædrus, Dist. Distribution. Burma

Ovate; head tumid between eyes, which are well separated from anterior margin of pronotum, in front of them depressed and subconically produced, antennæ with the first joint slightly incrassated and about reaching apex of head, second joint slender and considerably longer than first; rostrum short and moderately thick, second and third joints subequal in length; pronotum strongly centrally sulcated and deeply medially transversely impressed; scutellum with the apex longly apically produced, corium strongly sinuate near base, legs of moderate length anterior femora a little incrassated; anterior tibiæ a little shorter than anterior femora

1340. Rulandus phædrus, sp n.

Pale ochraceous; eyes, posterior lobe of pronotum, posterior discal area of corium, and meso- and metasterna pale purplish-

brown; basal joint of antennæ shorter than the head, second joint

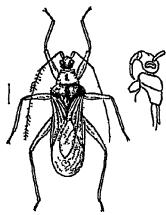


Fig 253 -Rulandus phædrus

nearly twice as long as first; anterior lobe of pronotum longitudinally sulcate, posterior lobe centrally, broadly excavate, lateral angles rounded; scutellum with the apex long, laterally posteriorly directed; posterior femora and tibiæ about equal in length, body distinctly finely pilose.

Length 4 millim

Hab Burma; Katha, Rangoon

(Fea)

This species is somewhat variable in coloration, sometimes the head, or again the whole of the pronotum, being pale purplish-brown

Division NABIDINARIA.

Coriscina, Stal, En Hem. in, p 106 (1873)

In this division the pronotum is provided with a transverse impression a little behind the anterior margin, thus constituting a distinct collar, the rostrum is long and slender; occili distinct, and the head always distinctly exserted, not immersed to eyes, which are well separated from the anterior margin of the pronotum

This is the best known division, as it contains the genus Nabis,

which is very widely distributed

Synopsis of Genera

A. Anterior coxe very long

a Anterior coxmicaching apex of mesosternum, lateral angles of pronotum rounded, not moduced

b Anterior coxe reaching middle of mesosternum, lateral angles of pronotum strongly produced

B Anterior coxe of moderate length

a. Posterior tibie simple, not incressated

b Posterior tibiæ in male globosely elavate near base .

Gorpis, p 397

Dodonæus, p. 398

Nabis, p 399

Lorichius, p 402

Genus GORPIS

Gorpis, Stål, Öfv Vet-Ak Forh 1859, p 377, id Hem. Afr. in, p 38 (1865), id En Hem in, p. 110 (1875)

Type, G. ombraticollis, Stal

Distribution Ceylon

Body elongate, head elongate, shorter than pronotum, cylin-

direal, more increased behind than before eyes; rostrum fourjointed, first joint short, increased, second subequal in length to
the two apical joints, third about twice as long as fourth joint,
antenne with the first joint longer than head; pronotum medially
and apically moderately constricted, base truncate, scutellum
triangular, apex subproduced, hemelytra complete, moderately
passing abdominal apex, legs long, slender, anterior, coxe very
long, extending to the apex of the mesosternum; anterior femora
slightly recurved, increased, and armed beneath with fine spinules,
anterior tibie a little shorter than the anterior femora, moderately
curved, and obsoletely crenulated beneath near apex.

1341. Gorpis cribraticollis, Stal, Ofv. Vet -Al. Forh 1859, p. 377.

Very pale inteous, first joint of antennæ, ocelli, outer margin of clavus, inner margin and apex of corium, spots to anterior

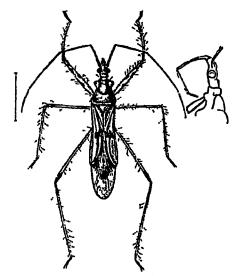


Fig 254 — Goi pis oribraticollis

femora, apices of posterior femora and bases of tibiæ sanguineous; corium with a transverse discal spot, obscure reddish-brown, pronotum densely granulate, the anterior lobe levigate.

Length 10 to 10½ millim Hab. Ceylon; Kandy (Green)

Genus DODONÆUS, nov.

Type, D. humeralis, Dist Distribution. Sikhim.

Allied to Gorpus, but with the lateral posterior pronotal angles prominently and obtusely angulately produced; antennæ longly pilose; membrane somewhat longly passing the abdominal apex; anterior coxe extending to near middle of mesosterium

NABIS. 399

1342. Dodonæus humeralis, sp n

Head, antennæ, rostrum, pronotum, membrane, sternum and legs pale ochraceous, corium and abdomen beneath strammeous; scutellum, clavus, a transverse fascia to corium a little beyond middle, and the mesosternum brownish-ochraceous; a narrow

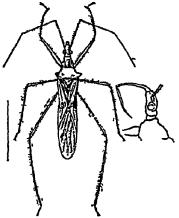


Fig 255 - Dodonæus humeralis

subclaval fascia to corium, margins of the transverse fascia to corium, apices of posterior femora, and base of posterior tibiæ rosaceous, first joint of antennæ about as long as head and anterior lobe of pronotum, first and second joints more longly pilose; pronotal lateral angles obtusely augulately produced, their apices a little upwardly recurved, membrane passing abdominal apex for about half their length.

Length, Q, $13\frac{1}{2}$ millim. Hab Sikhim, Mungphu (Atkinson, Brit. Mus).

Genus NABIS.

Nabis, Latr (part.) Gen ni, p 127 (1807), Spin Ess p 105 (1840), Fieb Eur Hem pp 43 & 159 (1861), Stal, Hem Afr. ni, p 41 (1865), Reut Rev. d'Ent 1x, p 293 (1890)

Cornscus, Schrank (part.), Faun Beic. 11, 1, p 46 (1801); Stal, En Hem 111, p 111 (1873)

Reduviolus, Kirby, in Rich Faun Bor -Amer. iv, p 279; Kirk. Faun Hawaiiensis, iii, p 153 (1902)

Subg Nabicula, Kn by, loc cit

" Hophstocelis, Acanthonabis, Lasiomerus, Halonabis, Stenonabis, Reut. Rev d'Ent 1x, p. 294 (1890)

" Stalia, Reut Ofv Vet-Ak Forh. 1872, No 6, p 94 " Aptus, Halin, Wanz 1, fig 24, A-C (1831).

Aspilaspis, Stål, En Hem 111, p 114 (1873)

Type, N. apterus, Fabr., a Palæarctic species. Distribution Of almost universal distribution

Body oblong or subelongate, narrowed anteriorly; head subcylindrical; eyes well separated from anterior margin of pronotum; ocelli placed behind eyes and at about same distance from them as from each other; rostrum long, often extending to or beyond the intermediate coxe, first joint very short; autennæ very finely pilose, first joint longly passing the apex of the head; pronotum strongly narrowed anteriorly, and near middle transversely impressed; scattellum equilateral; hemelytra sometimes abbreviated; legs long, slender, anterior femora slightly incrassated and becoming more slender towards their apices; anterior tibiæ shorter than the anterior femora

A. First joint of antennæ subequal in length to head.

1343. Nabis capsiformis, Germ in Silb Rov v, p. 132 (1837); Reut Ofo. Vet.-Al. Forh 1872, No 6, p 88, pl viii, f 9.
Nabis angustus, Spin Ess p 107 (1840)
Nabis longipennis, Costa, Atti Inst Sc Nat Napol 1848, p 250,

Freb. Lui Hem p. 161 (1861)

Nabis caffra, Sidl, Ofo Vet -Al: Forh 1855, p 39; id. Hem Afr iti, p 41 (1865)

Elongate, greyish-testaceous; an oblong spot between eyes, and sometimes a lateral spot behind eyes, a central fascia to pronotum

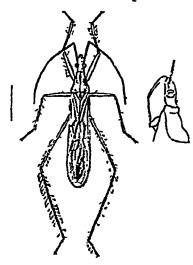


Fig 256 - Nabis capsiforinis

(sometimes abbreviated on postemor area), a central fascia (posteriorly abbreviated to scutellum), disks of meso- and metasterna (these shadings sometimes absent), lateral fasciæ, and sometimes an obsolete medial fascia to abdomen beneath, dull piceous; two punctate spots to corium (one behind middle, the other apical), a punctate spot near apex of membrane, and a more or less obsolete lateral fascia to prosternum fuscous: head a little shorter than pronotum, and behind eyes distinctly thickened, first joint of antennæ subequal in length to head; pronotum longer than its width at base; hemelytra much longer than

abdomen, femora minutely and obscurely speckled with pale fuscous

Length 8 to 9 millim.

Hab. Bombay and Bor Ghat (Dixon) Burma; Rangoon, Bhamo (Fea) —Also found generally in the Palmarctic, Nearctic, and Ethiopian Regions.

With the Bombay specimens before me, there can be no doubt

that Spinola's N. angustus is a synonym of this species.

1344 Nabis tibialis, ed. n

Shining piceous-brown; a lateral marginal fascia extending from anterior margin of eyes to base of head, two oblique discal fascize and the posterior margin to pronotum, two medial marginal spots to scutellum, claval suture, veins, lateral margin and a subapical spot to corium, lateral margins of abdomen, legs, rostrum, and antennæ luteous; apex of second joint of antennæ, extreme base of second joint of rostrum, spots to abdominal lateral margins,

NABIS. 401

and apices of femora and tibiæ black; obscure shadings to anterior and intermediate femora, and numerous annulations to tibiæ fuscous; membrane greyish, the venation pale fuscous; first joint of antennæ about as long as head, almost equal in length to second joint; posterior lobe of pronotum obscurely granulate; lateral posterior angles of pronotum subnodulose.

Length 7 millim

Hab. Ceylon; Peradeniya (Green).

1345. Nabis funebris, sp n.

Piceous-black; head, antennæ, rostrum, pronotum, prosternum, two obscure discal spots to scutellum, margins of abdomen, and legs ochraceous; annulations to first and second joints of antennæ, an obscure central fascia to head, a central and two oblique fasciæ on each lateral area of pronotum, spots to connexivum above and beneath, mottlings and apices to femora, and numerous annulations to tibiæ fuscous or piceous-brown, first joint of antennæ about as long as head; pronotum with collar well defined and the transverse medial impression profound; abdomen a little dilated on each side beyond middle

Length 72 millim.

Hab. Sikhim. Burma; Karennee.

B. Fust joint of antennæ distinctly longer than head.

1346. Nabis nigrescens, sp n.

Greyish-testaceous; a central fascia continued through head, pronotum and scutellum, head beneath, meso- and metasterna, lateral abdominal areas and posterior margins of abdominal segments, apices of femora broadly, apices of tibiæ narrowly, apices of first and second and the whole of succeeding joints of antennæ, membranal veins, and obscure intra-venal lines to corium dull piceous-black; first joint of antennæ distinctly longer than head; veins to corium distinctly elevated; pronotal collar well developed, its anterior and posterior margins carinate, lateral posterior angles subnodulose

Length 9½ millim. Hab Bor Ghát (Dixon).

1347. Nabis brevilineatus, Scott, A. M. N. H. (4) xiv, p. 40 (1874).

Var. Yellowish-brown; posterior lobe of the pronotum and the hemelytra dull in hue and opaque; anterior lobe of pronotum with transverse reddish strim, posterior lobe thickly granulate; a central spot to scutellium, basal halves of claval and subclaval areas, a linear spot near apex of corium, discal shadings to membrane, two broad annulations to anterior femora (one near base, the other near apex), two annulations on spical areas of intermediate and posterior femora, apices of first and second joints,

and a small medial spot to first joint of antennæ fuscous, anterior femora very strongly incrassated and minutely serrate heneath, first joint of antennæ longer than head, subequal in length to second joint; abdomen and corium concavely sinuate at middle, the first broadened and projecting beyond middle.

Length 9 millim

Hab Burma (coll. Dist.) — Japan (Lewis).

The above colour-variety has been compared with Scott's type.

Species not seen by writer.

1348. Nabis indicus, Stal (Aspilaspis), En Hem. iii, p 114 (1873)

Stal compares this species with the Palearctic N. viridulus, Spin. Allied to N. viridulus, which it closely resembles, but differs by its larger and more slender structure; head, laterally seen, more slender; posterior lobe of pronotum narrower; corium without fuscous marginal spot, but before middle at clavus smally nebulously infuscated; two vitte, the exterior short; membranal veins concolorous.

Length 8 millim.

Hab. "North India" (Stockholm Mus.).

Genus LORICHIUS, nov.

Type, L umbonatus, Dist. Distribution Tenasserim.

Body slender, elongate; bead shorter than pronotum, subcylindrical in front of eyes, tumid between eyes, which are well separated from antenor margin of pronotum; first joint of antennæ considerably longer than head; rostrum with the second and third joints subequal in length; pronotum with a distinct collar, and transversely impressed before middle; scutellum with the apex distinctly produced, hemelytra longer than abdomen; legs long, slender, pilose, posterior tibiæ in male globosely clavate near base; anterior tibiæ and femora subequal in length

1349. Lorichius umbonatus, sp. n

Head and anterior lobe of pronotum shining chocolate-brown; posterior pronotal lobe, corium, sternum, and abdomen beneath piceous; a central line to posterior pronotal lobe, scufellum, lateral margins of the hemelytra, and a spot near the inner angle

^{*} N rividulus, Spin Ess p 107 (1840) "Body and legs pale green without spots, corium of same colour, a large orange-yellow spot at the internal area of the corium; membrane hyaline, veins white, the green colour is sometimes pale yellow on the antennæ, tibiæ, tarsi, upper surface of head, and prothorax, but the hemelytra always exhibit the green coloration"

Widely distributed through Central Europe to Turkestan

of each; rostrum and legs luteous; a piceous spot on each side of scutellum; globosity at base of posterior tibiæ in male black, its

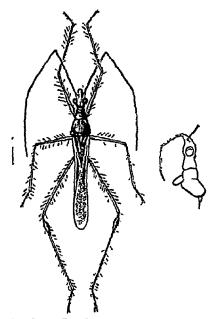


Fig. 257.-Lorichius umbonatus

base and the apex of posterior fewora reddish; antennæ infuscated, the first joint luteous; posterior lobe of pronotum granulose, legs somewhat longly pilose.

Length 6 millim

Hab. Ceylon; Peradeniya (Green). Tenasserim; Myitta (Doherty).

VOL II 2E

404 BALDIDÆ

Family SALDIDÆ.

Body oval, moderately convex; head short and broad, the eyes very large and prominent; ocelli present and situate between the eyes; rostrum three-jointed, bent at the base, so that in repose it

does not he against the under surface of the head

The insects composing this family are mostly semi-aquatic in habit, trequenting damp places, wet moss, sides of streams, &c.; some have been watched and observed to be capable of living for a time under water, others again are found on heaths and away from moisture altogether.

No Indian species of Saldidæ have been previously recorded We now enumerate three; an altogether insufficient number, and one that must necessarily be largely augmented when more attention is paid to these insects by collectors.

Synopsis of Subfamilies.

A. Two ocelli placed between the eyes Saldınæ.

B. Three ocelli placed between the eyes ... Leptopınæ.

Subfamily I. SALDINÆ

The extensive genus Salda practically composes this subfamily. Another Nearctic genus, Saldaida, has been recently founded, and we now describe a third from Ceylon

Synopsis of Genera

A Pronotum without anterior collar, its basal margin concavely sinuate, scutellum large

SALDA, p 404

B Pronotum with a double anterior collar, its basal margin straightly truncate; scutellum small

VALLERIOLA, p 405

Genus SALDA

Salda, Fabr. (part) Syst Rhynq p 113 (1803); Burm Handb 11, p 215 (1835), Amy & Serv Hém p 404 (1843), Fich Eur Hem pp. 40 & 144 (1861)
Acanthia (part), Fabr Syst Ent p 693 (1775)
Sciodopterus, Amy & Serv Hem p 404 (1843).
Subg Chiloxanthus & Calacanthia, Reut. Act Soc. Sc. Fenn XXI, 2, pp 4, 5 (1895)
Subg Chartoscirta, Stâl, Ofv Vet-Al. Forh 1868, p 393

Type, S. lettorales, Lann., found in both the Palearctic and Nearctic Regions

Distribution. Probably universally distributed

Broad, ovate; head short and broad, eyes large and prominent, with two ocelli placed between them; antennæ slender, somewhat thickened on apical area; rostrum with three joints; pronotum with the lateral margins carnate, the basal margin concavely sinuate; scutellum, large, somewhat foveately depressed at base; corium with the lateral margins moderately convexly rounded and deflected, membrane with four long subparallel cells; legs of moderate length, tarsi with three joints

1350. Salda dixoni, sp n.

Olivaceous-black, opaque, finely ochraceously pilose; lateral margins of corium, excluding base, luteous, widened at apical angle;

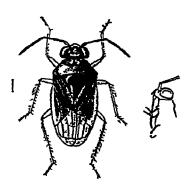


Fig 258 -Salda disoni

membrane very pale fuliginous, the veins fuscous; basal joint of antennæ, rostrum, and legs luteous, eyes brownish; third and fourth joints of antennæ subequal in length, second longest, first shortest, pronotum with a very obscure transverse medial impression, in front of which are two very obscure transverse callosities, basal margin concavely sinuate; scutellum discally depressed; the pilosity on the corium a little more pronounced.

Length 3 millim

Hab. Bor Ghát (Dixon).

Burma; Rangoon (Fea)—A single specimen was sent to me by Mr. R M Dixon, and I have seen a second example collected by Sign. Fea at Rangoon.

Genus VALLERIOLA, nov.

Type, V. green, Dist Distribution Ceylon.

Elongate, oblong, head short and very broad, eyes large, extending along the whole lateral margins of the head and a little upwardly recurved, ocelli two; antennæ very long and slender, basal joint short, incrassate, second joint considerably longer than head and incrassate at apex, third joint at least twice as long as second; iostrum reaching the anterior coxæ; pronotum with a double anterior collar, transversely constricted near middle, thence widened to posterior angles which are obtusely rounded, posterior margin straightly truncate; scutellum somewhat small, subtriangular, centrally foveate; hemelytra long, subparallel, a little narrowed

posteriorly, corium longer than abdomen, membrane with four long subparallel cells. legs slender femora distinctly incressate at base.

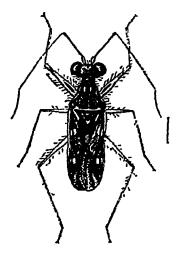


Fig. 259 — Valleriola greem

1351. Valleriola greeni, sp n

Black, opaque; basal joint of antennæ, posterior lateral margins, basal margin, and a central longitudinal line on posterior area of pronotum, apex of scutellum, a basal streak to clavus and apices of claval suture, lateral margins, two central and two subapical spots to corium, femora, and posterior segmental margins luteous, longitudinal streaks and apices to femora piceous.

Length 5½ millim.

Hab Ceylon; Peradeniya (Green). Caught running about on sides of a vessel containing stagnant water Very active; uses its wings readily (E E. Green).

Subfamily II. LEPTOPINÆ.

As already pointed out, the three ocelli between the eyes sufficiently separate this subfamily from the Saldinæ. The Leptopinæ are few in number, principally distributed in the Palæarctic Region, and represented in Madagascar. Being small, obscure, and little collected insects, nothing can be definitely stated as to their distribution.

Genus LEOTICHIUS, nov

Type, L glaucopis, Dist Distribution. Burma.

Elongately subovate, head somewhat short and broad, eyes very large, dilated, convexly rounded and upwardly reflexed, occilithree; antennæ with the first and second joints short, incrassate, subspinous, third and fourth joints slender and subequal, fifth a little thickened; pronotum strongly anteriorly constricted, widened on each side behind the constriction, the anterior margin a little convex, the lateral angles prominent and rounded, their apices obtusely subacutely recurved, posterior lateral margins oblique and a little concave, basal margin short, transverse; scutellum small, its apex strongly tuberculously raised; corium with the lateral margin sinuately waved, its apical margin sinuate, membrane passing the

abdominal apex; legs somewhat long and spinulose, the posterior thim strongly curved; tarsi long, the basal joint about as long as remaining joints together.

1352. Leotichius glaucopis, sp n.

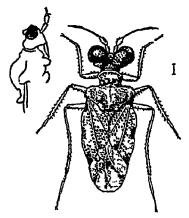


Fig 260 -Leotichius glaucopis

Greyish-brown, thickly very coarsely punctate, two spots at base of pronotum, extreme base and apex of tubercle to scutellum, three spots on lateral margin and a more obscure spot on apical margin of corium piceous; membrane pale fuliginous, partially suffused with fuscous; legs pale luteous, apices of femora, tibiæ, and tarsi infuscated; pronotal collar transversely structe, area of anterior constriction largely transversely tuberculate, posterior area with a strong central longitudinal ridge, the angles to posterior margin a little prominent

and glabrous, base of apical joint of antennæ pale luteous. Length $2\frac{1}{2}$ millim.

Hab. Burma, Rangoon

Family CERATOCOMBIDÆ

Ceratocombidee, Fieber, Eur. Hem. p 25 (1861); Reut. Act Soc. Sc. Fenn xix, no. 6, p 3 (1891)

Ocelli placed at the anterior margin of the eyes; rostrum threejointed; antennæ four-jointed, two basal joints very short and incrassate, first exceedingly short, second distinctly longer than the first, the two apical joints long, slender, setiform, longly pilose, head, pronotum, sternum, and hemelytra variable in structure; tarsi three-jointed.

A family comprising some very small or minute species found in

moss, dead leaves, and similar surroundings.

Subfamily CERATOCOMBINÆ

Ceratocombina, Reut Act Soc Sc Fenn xix, no. 6. p. 3 (1891)

Reuter has divided the Ceratocombidæ into two subfamilies, Ceratocombinæ and Schizopterinæ, the first of which may be easily distinguished, apart from other characters, by the long porrect head, which in the Schizopterinæ is shorter, transverse, and strongly deflected.

Genus CRESCENTIUS, nov.

Type, C principatus, Dist. Distribution. Burma.

This genus is founded on a single specimen collected by Sign Fea in Burma. It was drawn very carefully under the microscope by our artist, Mr. H. Knight, and the figure has been critically examined and approved by myself. By an unfortunate accident the minute specimen was destroyed under subsequent examination, and the generic and specific characters are therefore taken only from the figure, and are thus somewhat superficial.

Body elongate; head long, porrect, with a distinct circular indentation or foveation between the eyes, which are placed near the anterior margin of the pronotum, lateral margins longly pilose; rostrum at least reaching the intermediate coxæ; antennæ with the first and second joints minute, incrassate, second distinctly longer than first, third and fourth longly pilose, third somewhat thickened, with the apex a little incrassate and giving the appearance of another joint, hemelytra fully developed, membrane distinct, venation as portrayed on figure; apical segment of abdomen longly pilose; anterior tibus longly pilose; intermediate and posterior legs absent in the specimen figured.

1353. Crescentius principatus, sp n



Fig 261 Crescentius principatus

Dark and somewhat shining fuscous brown; first, second and third joints of antennæ ochraceous, with the pile fuscous, fourth joint dark fuscous; anterior legs stramineous, tibiæ darkly pilose or spinulose; pronotum with the margins distinctly and broadly defined, the anterior margin resembling a pronotal collar, disk with a central longitudinal impression, body above very thickly, finely, but obscurely tomentose.

Length 23 millim. Hab. Burma; Karennee (Fea)

Family CIMICIDÆ.

Ocelli absent; elytra short and broad, the broad abdomen being uncovered; head short and broad; rostrum contained in a groove beneath the head; tarsi three-jointed.

Genus CIMEX.

Cimex, sect. a, Linn Syst Nat ed 10, 1, p 441 (1758), Lati Gen. in, p. 136 (1807), Stål, En Hem ni, p 103 (1873)
Acanthia, Fabr Syst Rhyng p 112 (1803).
Klinophilos, Kirk Entomologist, 1899, p. 219.

Type, C. lectularius, Linn. Distribution Universal

Head longer than the medial part of the pronotum, considerably exserted; apical joints of antennæ slender; pronotum anteriorly strongly sinuate, anterior angles considerably produced, elytra rudimentary, transverse, broader than long; legs slender, femora moderately incrassate, tibiæ straight, anterior tibiæ three times or more than twice as long as the tarsi, posterior tibiæ three times as long as tarsi; body short, pilose, lateral margins longly setose.

1354. Cimex lectularius, Linn Syst. Nat ed 10, 1, p. 441 (1758), Stäl, En Hem 111, p 104 (1878), Saund Hem Het Brit Isld p 186 (1892)

Acanthia lectularia, Fieb Eur Hem p. 135 (1861).

Klinophilos lectularius, Ku k Entomologist, 1899, p. 220

Reddish-brown or brownish-yellow, strongly and thickly punctate, sparingly finely pilose; head with the eyes prominent; antennæ with the first and second joints stoutest, third and fourth very slender and finely pilose, first joint short, second and third subequal in length; pronotum with the anterior margin deeply sinuate, its lateral margins dilated, rounded, and outwardly longly pilose, the disk moderately glabrous and tumid; scutellum very short and broad; elytra transverse, short, strongly punctate, about twice as wide as long; abdomen finely punctate, connexivum a little reflexed; legs ochraceous

Length 5 to 6 millim

Hab Ceylon (Green), and throughout British India. — This insect is recorded from all parts of the world, and is everywhere a disgusting and hated human parasite.

"It was known to Aristotle as occurring in the Mediterranean Region in his time, but I believe the earliest recorded date of its having been observed in England is 1503." (W. F. Kirby.)

1355. Cimex macrocephalus, Fieb (Acanthia) Eur Hem. p 135, note (1861)

Alhed to C lectularius, but with the pronotum broader and



Fig 262 -Cimex macrocophalus.

less narrowed posteriorly, its disk more broadly tumid; abdomen a little more robust, &c.

Length 5 to 6 millim. Hab. Burma; Bhamo (Fea) 412

Family CAPSIDÆ.

This is an extremely large family, of which, apart from the Palæarctic and Nearctic species, and a considerable number of genera and species from Central America, our knowledge is still

fragmentary.

The Capside comprise insects with a more or less soft integument, but with most variable structural characters. The head is rarely provided with ocelli, the antenne are four-jointed, the first joint usually the stoutest, and the third and fourth the most slender, but this is not an invariable rule; the rostrum is four-jointed, and one of the best and most distinctive characters is found in the presence of a cuneus, or more or less triangular semi-detached piece at the apex of the corium.

It has been generally supposed that the Capsidæ subsist exclusively on the juices of plants, trees, and fruits, but this is not a universal habit. Records have long existed as to the predatory habits of some species on other insects, and this information has been well garnered and published by Reuter (Ent Month. Mag. 1903, p. 121) Another characteristic of the family is the wonderful simulation by many species of insects of other orders,

especially of ants.

Of the Palæarctic Capsidæ we know most, and of those belonging to the European section our knowledge is the most complete, and this largely owing to the work of Reuter. The Nearctic representatives are also fairly well worked, and the present writer has described a large number of species from Central America Of the Ethiopian Capsidæ very little is known; while, for the Oriental Region, the following pages contain by far the largest enumeration of genera and species. Some Australasian species have recently been described, but the Capsidæ of this great region are practically unrecorded

One of the most considerable aids to the study of the whole family was afforded by the late E. T. Atkinson, who, in 1890 (Journ. Asiat Soc Beng. lvin, pt 2, Suppl.), published a catalogue of the described species and genera to the year 1889 Considering that this work was prepared and published in Calcutta, it is somewhat remarkable how comparatively few are the omissions and errors which it contains, and it remains a witness to the loss which the study of Rhynchota sustained in the premature death

of its compiler

The classification of the family is largely dependent on the work and propositions of Reuter, who has made the Capside a special study, and I have endeavoured to follow his arrangement as far as my own views will allow; but at present the classification of the family is more reflective of personal opinion, and contrived for the purposes of entomological arrangement, than exhibiting an

CAPSIDÆ. 413

evolutionary or philosophical conception The Capside are a very difficult group to study, their affinities are of the most complicated description, and for the present we must be satisfied with a somewhat artificial or cabinet arrangement. Where I have diverged principally from the excellent work of Reuter, is in the taxonomical value ascribed to a structural character of the head In my opinion a longitudinal incision or sulcation on the upper surface of this region is a primary distinction, and affords a character for the separation of a distinct subfamily. remaining genera fall into two other subfamilies by the presence or absence of ocella. This arrangement naturally exhibits in the first two subfamilies, Mirina and Capsina, some considerable superficial resemblance between certain genera belonging to the two groups, as, for example, the genera Megacolum (Mirinæ) and Calocoris (Capsinæ); but this is only what is more or less seen in any large divisions which have become necessary for the classification of other animals, though it constitutes the greatest divergence between the classification pursued here and elsewhere

As regards the divisions in each subfamily no fixed rule exists, either in proposition or sequence. Those of Reuter are generally accepted, but at least their sequence is not followed by Uhler, and they are altogether unused by Saunders. Their value, however, cannot be overestimated as factors in generic discrimination, if their structural differences are not appraised at too high a value; they are but means to an end, and this at present is all

we can expect.

It is necessary here to make a few remarks as to the priority of the names given to these divisions, a question which seems likely to reduce the whole arrangement to chaos. By some recent writers it is insisted that the name of a division must necessarily be founded on that of the earliest described genus which it contains, and this, if feasible, would doubtless constitute a good rule. But it is at once evident that such a procedure could result in no finality, and must obscure any reasonable classification by constant and useless changes. For instance, a writer forms a new division, and gives it a name founded on the earliest described genus which it is then known to contain. Another worker is subsequently able to include another and older genus in the group, and therefore a change of divisional name is, on this argument, necessitated, to be again and again repeated as other and earlier described genera may be found to fall into the divisional group. Kirkaldy, in his contribution to the 'Fauna Hawanensis,' has shown by his almost universal change of nomenclature what this process may produce, and these remarks are intended as our vindication for not recognizing the same. A similar argument has been used to even alter the family name Capside to Miride, because the genus Miris was earlier described than Capsus'. In such a course what entomological name would stand? In Rhopalocera, Lycæmdæ must become a deposed term, and m the Hymenoptera, as Col. Bingham informs me, the family

name Pompilide must disappear, as it is founded on Pompilius (1798) and contains a genus Ceropales (1796) These are only examples '

Synopsis of Subfamilies.

B. Head entire, neither sulcate nor excavated.

a. Head without, or practically without, ocelli .. Capsinæ
b Head provided with distinct ocelli Isometopinæ.

Subfamily I. MIRINÆ,

Mirides, Amy & Seiv Hém p 277 (1843). Myridina, Beig, Hem Argent p 117 (1879) Capsine, Div. Miraria, Dist Biol Centr-Amei, Rhynch 1, p 235 (1883) Miraria, Reit Act Soc. Sc Fenn. xiii, p. 565 (1884).

This subfamily is universally distributed, and, as in the Capsidæ generally, comprises insects of most diverse facies.

Division HERDONIARIA.

Herdoniaria, Dist A M N. H. (7) xiii, p 103 (1904). Pilophoraria (part), Reuter, Act Soc Sc. Fenn xiii, p 566 (1884).

Allied to the Myrmeconaria, Reut.

Cuneus always discernible, head prominent, sometimes very large, always with a distinct longitudinal impression between the eyes; pronotum transversely constricted, the anterior area or lobe somewhat broad and long, but never broader, and generally narrower, than the posterior area; second joint of the antennæ either very strongly or slightly apically incrassated; scutellum sometimes spined.

The Nearctic and Neotropical genus Xenetus, Dist., I take as typical of this division, and I also include the genera Herdonius, Stal, Zacinthus, Dist., Zosippus, Dist., Minytus, Dist., Saturnomiris, Kirk., Erotocoris, Dougl. & Scott, Systellonotus, Fieb., and

apparently Chrysorrhams, Kirk.*

Synopsis of Genera.

A Eyes well separated from anterior margin of pronotum

a. Apex of second joint of antennæ incrassate, lateral margins of pronotum concavely sinuate, hemelytra about twice as long as head and pronotum together.

IBABELLINA, p 415

^{*} Some of these genera are claimed by Bergroth (Wien ent. Zeit xvii, p 35, 1893) as belonging to Reuter's division Pilophorama, to which they have a superficial resemblance, but are separable by the longitudinal sulcation to the head

Mecistoscelis,

CLAPMARIUS, p 419

b Apex of second joint of antenna not incrassate; lateral margins of pronotum nearly straight, not sinuate; hemelytra about three times as long as head and pronotum Onomaus, p 416 B Eyes touching or almost touching anterior margin of pronotum a Legs and antenne of moderate size and a Pronotum moderately constricted, scu-[p 417. tellum longitudinally sulcate CALLICRATIDES, b Pronotum strongly constricted; scutellum fovente Habpfdona. p 418 b Legs and antenne very long. a First joint of antenne as long as head and pronotum together, rostrum considerably passing posterior coxe; pronotum coarsely punctate or subrugulose - Mystilus, p 420 b First joint of antennæ as long as head, pronotum, and scutellum together; rostrum reaching intermediate coxe, prop 421

Genus ISABELLINA.

Isabel, Kirk J Bomb N H Soc xiv, p. 58 (1902)

notum moderately punctate

c. Antennæ with the first joint strongly am-

Type, I. ravana, Kirby. Distribution. Ceylon.

pliately incrassate

Head triangular, subhorizontal, with a central narrow longitudinal impressed line or sulcation, eyes well separated from anterior margin of pronotum; rostrum reaching apex of posterior coves, antenne moderately long and slender, second joint slightly more than twice as long as first and distinctly thickened at apical area, basal joint slightly thickened, eyes distinctly separated from anterior margin of pronotum; pronotum with the basal at least twice as broad as anterior margin, with a central longitudinal sulcation, and two transverse impressions, one immediately behind anterior margin, the other before middle, lateral margins concavely sinuate, posterior angles subspinously produced, disk transversely rugosely striate; scutellum moderately tumid; hemelytra subhyaline; legs of moderate length, posterior femora moderately incrassated, tibus finely setose.

Kirkaldy placed this genus in the Capsaria. He had, by the omission in his description, evidently overlooked the central longi-

fudinal incision to the head.

1356. Isabellina ravana, Kirby (Capsus), J Linn Soc, Zool xxiv, p 106, pl. iv, f. 10 (1891), Kirk (Isabel) J Bomb. N H. Soc. xiv, p. 58, pl A, f. 9, pl B, f 7 (1902)

Very pale testaceous, more or less mottled and speckled with

416 CAPSIDÆ

reddish, head and pronotum with longitudinal reddish or brownish

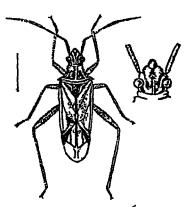


Fig 263 — Isabellina i avana

stripes, pronotum with the posterior lobe thickly transversely striate; scutellum brownish, with three pale longitudinal lines, one central, the others on lateral margins; hemelytra pale sub-hyaline, the clavus, subclaval area, and lateral margins ochraceous, cuneus and veins to membrane reddish, antenne with the first and second joints ochraceous with fuscous speckles, second joint with apex reddish, remaining joints fuscous, third luteous at base; legs more or less speckled with dull reddish, especially on posterior femora.

Length 7 to 8 millim.

Hab. Ceylon, Pundaluoya (Green). Burma, Kaiennee

Genus ONOMAUS, nov.

Type, O pompeus, Dist. Distribution. Assam, Buima

Subelongate; head moderately large and tunid above, strongly perpendicularly deflected in front of antennæ, distinctly centrally sulcated, eyes well separated from anterior margin of the pronotum, antennæ a little shorter than the body, first joint a little longer than head and anterior area of pronotum together, second joint longest, slightly longer than third, nostrum reaching posterior coxe, first joint about as long as head, pronotum subtriangular, narrowed anteriorly, with a very narrow anterior collar and somewhat obscurely constricted at about one-third from anterior margin, posterior margin upwardly curved at lateral angles, which are subprominent; scutellium tunid, hemelytia with the lateral margins a little sinuate, corium with cuneus about as long as abdomen, membrane with an elongate, basal, subquadrate cell; legs long, tibre longer than femora, posterior tibre half as long again as femora, cuneus longer than broad

1357. Onomaus pompeus, sp n

Head ochraceous, its apex, basal margin, central sulcation, and the antennæ piceous, basal half of third joint of antennæ luteous, pronotum dark chocolate-brown, the narrow anterior collar, anterior area, and a central longitudinal line to posterior area luteous, a central piceous spot on anterior luteous area, scutellum pale virescent, its basal and lateral margins, central line and apex piceous,

corrum and cuneus pale luteous; clavus, a transverse fascia beyond

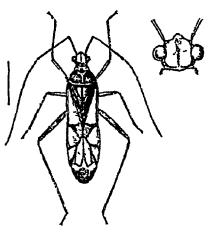


Fig. 264 - Onomaus pompeus

middle, apical margin and apical area of cuneus chocolate-brown; membrane pale ochraceous, its apex broadly fuscous, the venation piceous; sternum piceous; abdomen beneath luteous, its lateral margins and transverse segmental fasciæ pale sanguineous; legs luteous, apiees of anterior and intermediate femora, two very broad annulations to postenor femora, and bases of tıbiæ pale sanguineous; apices of anterior and intermediate tibiæ, subbasal annulation to posterior tibile, and apices of tarsi piceous.

Length 10 millim.

Hab. Assam; Nága Hills (Doherty) Burma (Coll. Dist.)

Genus CALLICRATIDES, nov.

Type, C. 1 ama, Kirby. Distribution, Ceylon

Body oblong; head with eves much broader than anterior margin of pronotum, disk between eyes with a flat shield-like process, which extends to the antenniferous tubercles, but does not quite reach base, distinctly longitudinally impressed or finely sulcate, apex poriectly deflected in front of this process; antennæ inverted in front of the eyes, basal joint incrassated, about as long as head, moderately curved outwardly, second joint longest, moderately thickened, about four times as long as the first; rostrum not quite leaching the posterior coxæ; pronotum about as long as broad, obsoletely constricted at about one-third from apex, narrowed anteriorly, basal twice the width of anterior margin; scutellum moderately long, tumid, subdepressed and longitudinally sulcate; hemelytra hyaline; corium with cuneus just passing abdominal apex, cuneus longer than broad, membrane with a long basal cell; legs of moderate length, posterior femora longest and incrassate.

By the structure of the hemelytra resembling Hyalopeplus, Stal, but differing entirely from it by the structure of the head.

1358 Callicratides rama, Kirby (Capsus), J Linn Soc, Zool. xxiv, p 106 (1891), Kirk (Hyalopeplus) J Bomb N H. Soc xiv, p 58, pl A, f 8, pl B, f 6 (1902)

Pale ochraceous; antennæ sometimes fuscous, sometimes with

418 CAPSIDE.

first joint and basal half of second more or less ochraceous, pronotum with the anterior lobe finely mottled with reddish, basal margin and some linear spots at anterior margin black, a central longitudinal line black or reddish, the lateral margins

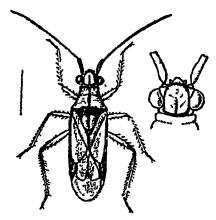


Fig 265 - Calliciatides rama

also sometimes black; hemelytra hyaline, the lateral margins and cuneus reddish, the venation piceous, femora, especially posterior femora, finely spotted with fuscous-red, their bases unspotted

Length 8 to 9½ millim.

Hab. Ceylon; Peradeniya, Nawalapitiya (Green).

Genus HARPEDONA, nov

Type, H. marginata, Dist. Distribution. Ceylon.

Subelongate; head moderately robust and tumid, somewhat obscurely but broadly centrally longitudinally sulcate; antenne with the first joint about as long or scarcely as long as head, second joint more than twice or nearly three times as long as first, its apex very slightly thickened; pionotum moderately long, with a distinct narrow anterior collar, and transversely constricted before middle, anterior lobe much narrower and shorter than posterior lobe, with a small distinct foveation at centre of its posterior margin, posterior lobe finely and obscurely punctate, its posterior lateral angles subprominent; scutellum somewhat small and foveate; hemelytra a little narrowed posteriorly, with the lateral margins straight and subparallel; cuneus broad, legs slender, rostrum passing the anterior come (imperfectly seen owing to typical specimen being in a carded condition), first joint about as long as head, first and second joints subequal, third and fourth short.

1359. Harpedona marginata, sp n.

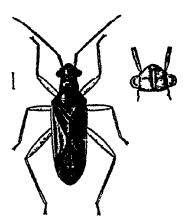


Fig. 266 —Harpedona marginata

Black; base of first joint of antennæ, coxæ, trochanters, legs, rostrum, and lateral margins of corum stramineous; abdomen beneath ochraceous, the margins and apex piceous; pronotal collar and anterior lobe shining black, posterior lobe subopaque, finely and obscurely punctate, and shortly pilose; un apical line on upper surface of posterior femora, and the posterior tibiæ, excluding apices, pale fuscous

Var. Corium excluding clavus

pale fuscous-brown.

Length 31 millim.

Hab. Ceylon, Peradeniya (Green).

The type with the corium wholly black is in the British Museum; a series of specimens since received from Mr. Green constitute the variety described above.

Punctures the foliage of Dioscorea sp., and causes considerable injury to this yam-plant (E. E. Green).

Genus CLAPMARIUS, nov.

Type, C turgidus, Dist. Distribution. Ceylon.

Body elongately subovate, head somewhat long and triangularly

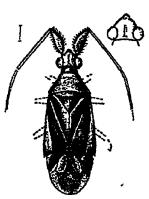


Fig 267 Clapmarius turgidus

produced in front, distinctly centrally sulcated; eyes somewhat large, extending from near base of antenna to anterior margin of pronotum; antennæ with the first joint about as long as pronotum, pilose, much ampliately incressate, profoundly attenuated at base, narrowed at apex, second joint slender, about half as long again as first; rostrum about reaching the posterior coxæ (as seen on carded specimen), pronotum rugulose, more than twice as broad at base as at apex, anteriorly constricted near anterior margin; mesonotum exposed. scutellum inely transversely striate; corrum a little widened posteriorly,

its apical angle acute, and with an apparent foveation at apex of clavus which is broad and long; cuneus a little longer than broad, the fracture profound, legs mutilated in typical specimen

YOL. II

420 CAPSID.E.

1360 Clapmarius turgidus, sp. n.

Above very dark castaneous, lateral margins of corium (widened posteriorly) and the cuneus paler, antennæ very pale castaneous, the second joint and rostrum ochraceous; membrane fuliginous, pronotum rugulose; scutellum finely transversely striate, hemelytra obscurely pubescent; legs mutilated in typical specimen

Length 4 millim.

Hab Ceylon; Yatıyantota (Green).

Genus MYSTILUS, nov

Type, M. priamvs, Dist Distribution, Tenasserim Subalanceta, head broad

Subelongate, head broad, deeply centrally, longitudinally sulcate,

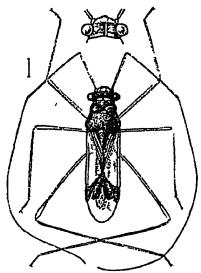


Fig 268 -Mystilus priamvs

somewhat conveyly produced in front of eyes, which touch the anterior margin of the pronotum, but project beyond it. antennæ very much longer than the body, with the first joint almost as long as the head and pronotum together, remaining joints very slender, rostrum considerably passing the posterior coxe; pronotum sub-quadrate, a little narrowed anteriorly, very coarsely punctate or subrugulose, constricted at about one-third from anterior margin, where there are two rounded callosities, scutellum moderately turnd, hemelytra hyaline, lateral margins slightly sinuate, legs very long, posterior tibiæ vely much longer

than the femora; cuneus a little longer than broad.

1361 Mystilus priamus, sp n

Head, antennæ, pronotum, and scutellum black, opaque, hemelytra pale greyish hyaline; base and apex of clavus, apical margin of corium, cuneus, and basal cell to membrane dark fuscousbrown, rostrum and legs brownish-ochraceous, bases of femora and apices of tibiæ luteous; sternum piceous, abdomen beneath ochraceous, with its apical area and upper surface piceous; base of first joint of antennæ, apex of head, and two spots between the eves ochraceous.

Length 4 millim
Hab Tenasserim, Myrtta (Doherty)

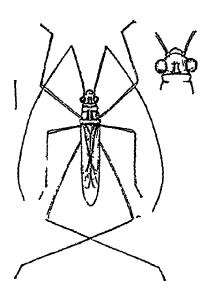
Genus MECISTOSCELIS.

Mecistoscelis, Reut Rev d'Ent. x, p. 131 (1891)

Type, M sciritioides, Reut. Distribution. Java, Tenasserim.

Body elongate, head robust, councally produced and deflected before insertion of antennæ, the disk centrally longitudinally sulcate, antennæ much longer than body, basal joint about as long as head, pronotum and scutellum together, remaining joints very slender, second longer than first; rostrum reaching the intermediate covæ; eyes prominent, almost touching the anterior margin of the pronotum, but projecting beyond it; pronotum subquadrate, longer than broad, a little narrowed anteriorly, punctate, with a narrow anterior collar, and two transverse callosities between it and a transverse constriction at about one-third from anterior margin, hemelytra narrow, their lateral margins slightly sinuate, cuneus longer than broad; legs long and slender, femora very slightly incrassate at apices, posterior tibiæ very long.

1362 Mecistoscelis scirtetoides, Reut Rev d'Ent 1891, p 132



Tig 269 - Medistuscelia scirtetoiles

Length 6 to 7 millim

Mat. Tenasserim, Myitta (Doherty) — Java (fide Renter).

Head ochraceous, sometimes basal margin, and sometimes (as in specimen here figured) two discal lines piceous, pronotum irrescent: transverse incisures, and two discal parallel lines, not reaching base, fuscous, in some specimens these darker markings are almost obsolete: scutellum virescent, hemelytra pale virescent semi-hyaline, the extreme base and whole of clavus dark fuscous; membrane very pale fuliginous and with a pearly virescent tinge, the veins darker; sternum infuscated, abdomen pale ochraceous or \irescent. legs ochraceous, apices of tibiæ and tarsi fuscous; antennæ with the first and second joints more or less ochraceous, 1emaining joints fuscous.

Species unknown to the writer.

1363 Systellonotus palpator, Kilk Tr. E S. 1902, p 247.

"Blackish-brown, shining, antenuæ stramineous, more or less infuscate; legs pallid, more or less infuscate, basal two-thirds of posterior femora dark; elytra fuscous, cuneus and lateral margins darker; a small spot at junction of clavus, corrum, and membrane. and two large coral spots (at base and apex, the latter extending a little on to the clavus) white; membrane pale fuscous, a white central transverse band; venter black.

"d. Body sparsely and shortly pilose, head (with eyes) broader than long, short behind the eyes, the latter prominent; antennæ not incrassate, second joint four times as long as first,

two-thirds longer than third."

Length 31 millim.

Hab. Sind, Karachi (fide Kirkaldy).

Mr. Kirkaldy does not mention any sulcation to the head, a character of Systellonotus.

Division MIRARIA.

Muaria, Reut Hem. Gymn Ew 111, p 565 (1883), Dist Biol. Centr -Am, Rhynch 1, p 235 (1883).

In this division, as I recognize it, the head is always porrect and well developed in fi ont of the antenniferous tubercles and distinctly longitudinally impressed or sulcate between the eyes; the pronotum is not distinctly transversely constructed, nor does it exhibit distinct anterior and posterior lobes; the basal joint of the antennæ is usually hirsute, but this is not an invariable character.

I now also include in this division the Neotropical genera

Jacchinus, Dist, and Paas, Dist.

Synopsis of Genera

A. Head elongate, longer than broad.

a Basal margin of pronotum concavely sinuate, exposing base of mesonotum.

b Basal margin of pronotum truncate, base of mesonotum not exposed

a Rostruth either not passing or not reaching posterior coxe.

a' Pronotum and scutellum distinctly punctate ...

62 Pronotum and scutellum impunctate b Rostrum passing posterior coxe

B Head transverse, about as long as broad

a Rostrum reaching or passing posterior coxe Migacollum, p 427.

b Rostrum not passing intermediate coxe a Pronotum distinctly punctate

a'. Body elongate, not pilose above, lateral pronotal angles subpromi-

a2 First joint of antennæ about as

MEGALOCERÆA, p 424

Miris, p 423. Matenesius, p 425 RHINOMIRIS, p 426

MIRIS. 423

Genus MIRIS.

Miris, Fabr Syst. Rhyng pp ix & 253 (1803), Burm Handb 11, 1, p. 264 (1835), Amy. & Serv Hém p 277 (1843); Kirschb Caps. v Nassau (1855); Reut Bih Vet Ah Handl 111, 1, p. 8 (1875). Myris, Hahn, Wanz. Ins 11, p. 73 (1834). Lopomorphus, Dougl & Scott, Brit. Hem p 293 (1865)

Type, M. Levigatus, Linn., a Palæarctic and Nearctic species. Distribution. Probably universal.

Elongate or subelongate; head with a distinct longitudinal impression, the eyes touching the anterior margin of the pronotum; antennæ with the basal joint robust, longly pilose or setose, about as long as the head or a little longer; rostrum extending to about the apex of the mesosternum; pronotum very strongly punctate, with the base truncate, and concealing the base of the mesonotum; scutellum also distinctly punctate, legs usually elongate, and posterior femora very seldom dentate.

1364. Miris atkinsoni, sp 11

Very pale brownish-ocliraceous, head and anterior area of

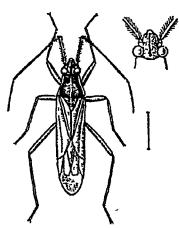


Fig 270 -Miris atkinsoni

pronotum pale brownish, posterior two-thirds of pronotal area tuscously punctate, the lateral margins and a narrow central longitudinal line pale ochraceous; scutellum fuscously punctate, the apex impunctate and pale ochraceous; corium and cuneus pale ochraceous, with some nearly obsolete reddish shadings, more distinctly visible at apex of clavus; membrane subviridescent, the venation ochraceous; antennæ with the first and base of second joint strongly pilose, first joint a little incressate, about as long as pronotum, second joint more than twice as long as first; head

anteriorly finely punctate, basal area impunctate, where the central sulcation is more profound.

Length 9 millim.

Hab Nilgiri Hills , Utakamand (Atkinson, Brit. Mus).

424 CAPSID.E

Genus MEGALOCERÆA

Megalocerea, Wien ent Monats 11, p 301 (1858), id Eur Hem pp 62 & 243 (1861); Reut Bih Vet-Akad Handl 111, 1, p 8 (1875)

Subg Notostira, Megalocerrea, Trigonotylus, Tich tom cit.

Type, M recticor ars, Geoffr, a Palæarctic species. Distribution Probably universally distributed

Allied to the preceding genus (Mn is), but differing in the sinuate basal margin of the pronotum, which is only obsoletely punctate, the non-punctate scutellum, and the exposed base of the mesonotum.

A. Basal joint of antennee strongly his sute

1365 Megaloceræa graminea, sp n.

Very pale dull ochraceous; posterior lobe of pronotum and hem-

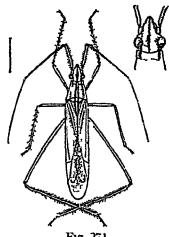


Fig 271 Megaloceræa gramineu

elytra, excluding clavus and claval area, pale greyish, abdomen beneath pale greyish, its lateral margins roseate; second joint of antennæ (sometimes excluding base), posterior tibiæ (excluding base), and basal joint of posterior tarsi roseate, apices of tarsi piceous, first joint of antennæ and the base of second strongly hirsute, first about as long as head and pronotum together, second longer than first and shorter than third, head sharply longitudinally incised between eyes. pronotum and scutellum with a central continuous pale linear fascia, anterior pronotal lobe with some transverse darker markings

Length $7\frac{1}{2}$ to 8 millim.

Hab. Ceylon, Pundaluoya (Green). Burma, Ruby Mines (Doherty)

Swept from grass (E E Green).

1366. Megaloceræa antennata, sp n

Dull pale ochraceous; antennæ with the first joint incrassate, thickly finely hirsute, and thickly speckled with sanguineous, apical areas of the femora obsoletely speckled with sanguineous; lateral margins and a central longitudinal line to pronotium pale ochraceous, legs pilose; head very distinctly pilose on posterior area; pronotium thickly and finely punctate, an impunctate callose spot on each side near anterior margin, scutellum transversely structe,

with a central longitudinal carination, tibiæ thickly and longly pilose

Lencth 8 millim

Ha Sikhim; Kurseong (Coll Dist)

B. Basal joint of antenna not his site

1367. Megaloceræa elongata, sp. n

Ochraceous, legs black, pronotum and scutellum with a central pale linear fascia; membrane pale ochraceous the mesosternum and lateral areas of prosternum greyish ochraceous, rostrum just passing the posterior coxe, its apex piceous, antennæ not hirsute, first joint incrassate, a little longer than head, second and third joints longest and subequal in length; head with a sharp central longitudinal incision between the eyes, anterior lobe of pronotum with some transverse testaceous markings, posterior lobe obsoletely punctured; apices of the tarsi piceous.

Length 11 millim.

Hab Ceylon, Pundaluoya (Green).

1368. Megaloceræa dohertyi, sp n

Head, pronotum, scutellum, body beneath and legs pale ochraceous; hemelytra strammeous, antennæ purphsh-red, lateral margins of pronotum and a central longitudinal line extending throughout scutellum creamy-white; eyes piceous; first joint of antennæ a little incrassate, about as long as head, second and third joints long, about subequal in length, head with the lateral margins and a central longitudinal line narrowly purplish-red; pronotum with the lateral and anterior margins acutely reflexed, posterior margin concavely sinuate, a transverse incision on each side before anterior margin.

Length 4 millim.

Hab Tenasserim; Myitta (Doherty)

Genus MATENESIUS, nov.

Type, M. marginatus, Dist.

Distribution Ceylon, Tenasserim

Moderately elongate, head distinctly longitudinally incised between eyes, which almost touch the anterior margin of the pronotum, first joint of antennæ about as long as head or slightly longer, somewhat strongly thickened, hirsute, second long, slender, a little shorter than third; rostrum reaching the posterior covæ; pronotum impunctate, its lateral margins a little carinately ampliated, its base truncate, a little oblique near angles, transversely constricted towards middle; scutellum small, triangular, impunctate; hemelytra distinctly broader than abdomen; cuneus longer than broad; membrane with a single subovate cell; legs of moderate length, pilose: hemelytra much longer than body: membrane considerably passing abdominal apex.

1369. Matenesius marginatus, sp n.

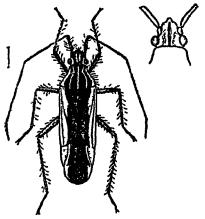


Fig 272.—Matenesius marginatus

Chocolate - brown; head ochraceous; three longitudinal discal lines to pronotum, lateral margins to pronotum and hemelytra (the last broad), and narrow lateral margins to sternum and hemelytra beneath stramineous; scutellium and clavus (excluding apex) black; disk of membrane pale fuscous; body beneath and legs ochraceous; legs longly pilose.

Length 41 millim.

Hab. Ceylon; Pundaluoya (Green). Burma; Karennee (Fea). Tenasserim; Myıtta (Doherty).

Genus RHINOMIRIS.

Rhinomiris, Kirk. Tr. E. S. 1902, p. 268

Type, R. vicarius, Walk.

Distribution. Oriental Region.

Head subhorizontal, produced triangularly in front of eyes, which are large and almost touch the anterior margin of the pronotum, disk distinctly longitudinally sulcate between eyes, antennæ long, nearly as long as body, first joint about as long as head and considerably passing its apex; rostrum very long, passing posterior coxæ; pronotum finely rugulose, almost medially constricted, the anterior area laterally rounded, moderately gibbous on disk, and with a central impressed line, posterior area

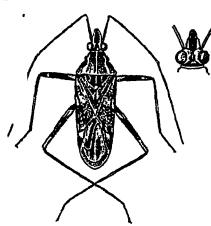


Fig 273.—Rhinomiris vicarius

laterally obliquely widened to posterior angles, the basal margin moderately simuate, scutellum somewhat tumid, legs moderately long and slender.

1370. Rhinomiris vicarius,

Walk (Capsus) Cat

Het vi, p. 121 (1873),

Kirk Tr. E S 1902,

p 269.

Capsus canescens, Walk.

Cat Het. vi, p 121

(1873).

Head and pronotum ochraceous; head with a central anterior fascia and the eyes

piceous, pronotum with four broad longitudinal fasciæ, two central and one at each lateral margin, piceous; scutellum ochraceous,

with the basal angles and two central fasciæ piceous; corium purplish-brown, thickly covered with small bright ochraceous spots, a larger spot at apex of clavus and the inner margin unspotted, a dark purplish spot on apical margin near inner angle, cuneus shining piceous; membrane greyish-brown, the veins ochraceous, their margins, apical margin, and some discal oblique streaks purplish-brown; body beneath ochraceous with piceous shadings; legs purplish-brown, femora and them annulated with luteous; antennæ brownish-ochraceous, apices of the joints infuscated.

Length 7½ to 9½ millim.

Hab. Assam; Margherita (Doherty) Burma; Karennee (Fea) — Siam and Malacca (Brit. Mus)

Genus MEGACELUM.

Megaccelum, Fieb Wien ent Monats 11, p 305 (1858); Stål, Hem Afr. 11, p 18 (1865); Reut Act Soc Sc. Fann xxiii, no 2, p 230 (1897)

Creontiades, Dist Biol Centr-Amer, Rhynch i, p. 237 (1883).

Pantiliodes, Novall Ann Soc Ent. Fr 1893, p 15

Umslopogas, Kirk Tr E S 1902, p 254 Kangra, Kirk Tr E S 1902, p 257

Type, M. infusum, Herr.-Sch, a Palæarctic species.

Distribution Palæarctic, Nearctic, Neotropical, Ethiopian,

Oriental, and Australasian Regions.

Body elongate, head moderately and obliquely deflected before eyes, and with a distinct narrow central longitudinal sulcation; eyes somewhat prominent and contiguous to the anterior margin

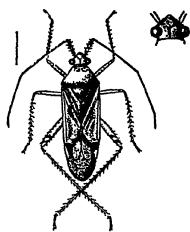


Fig 274 —Megacalum antennatum

of the pronotum; antennæ about as long as the body, basal joint stoutest, as long as the head or longer, and sparingly but prominently hirsute, second joint about twice the length of the first, somewhat slender, slightly curved. and a very little incressated at apex, third joint a little shorter than second, fourth about half the length of third or less: pronotum subtriangular. with a distinct narrow anterior collar, the anterior margin about half the width of posterior; scutellum large, its disk somewhat longitudinally raised and the lateral margins ob-

liquely rounded, corum with the lateral margins subparallel; legs long, sparingly hirsute, the tibie with long and prominent setæ; posterior tarsi with the joints variable in length; rostrum reaching or passing the posterior coxæ.

a First joint of posterior tars shorter than second or third joint

1371 Megaccelum antennatum, Kn by (Capsus), Linn Soc, Zool xxiv, p 107 (1894).

Head and pronotum pale testaceous, very finely punctured; pronotum usually more or less shaded with purphsh-brown, antennæ ochraceous, apices of the joints and a central annulation to the second joint fuscous-black; scutellum and corium purphsh-brown, apex of scutellum and lateral margins of corium pale ochraceous, cuneus purphsh, its apex ochraceous, membrane pale fuliginous, legs luteous, apices of femora more or less testaceous; head with a distinct central longitudinal sulcation; tibue longly setose

Length 7 to 8 millim.

Hab Nilgiri Hills (Hampson) Ceylon (Lewis); Pundaluoya (Green).

1372 Megacœlum relatum, sp. n

Dark chocolate-brown, corium with the base of lateral margin and two submarginal lateral streaks on apical area obscure ochraceous, cuncus castaneous, its extreme apex piceous; coxæ, bases of femora and mottlings to tibiæ obscure stramineous; antennæ obscure stramineous, basal joint speckled with fuscous, apical joint infuscated.

Var Whole lateral margin to corrum somewhat broadly obscure ochraceous

Length 51 millim.

Hab. Ceylon; Kandy (Green).

Allied to M. antennatum, but smaller; almost uniformly dark -chocolate-brown above, colour of antennæ different, &c

1373. Megacœlum stramineum, Walk (Capsus) Cat. Het vi, p 120 ... (1873)

Kangra dudgeoni, Kuk Tr E. S 1902, p. 257

Pale ochraceous, corium with a slight virescent tinge; eyes and apex of scutellum piceous, apical areas of posterior femora testaceous; membrane pale hyaline, head with a distinct central longitudinal sulcation, antennæ with the first and second joints luteous, remainder fuscous, head, pronotum and scutellum very finely ochraceously pilose, tibiæ longly setose

Length 7 to 8 millim

Hab North Bengal (Campbell, Brit Mus.). Kangra Valley

(Dudgeon) Ceylon, Pundaluoya (Green)

In his description of this species, Kirkaldy writes. "A number of oblique striæ on each side of vertex in front of the eyes, interior margin of clavus, apical margin of corium, membranal nervures, sanguineous." This probably relates to a very fresh specimen of the species

Swept from grass (E E. Green)

b First joint of posterior tars longer than second and about equal in length to third your

1374 Megacælum rubricatum, sp n.

Head, antennæ and pronotum ochraceous, a central line to apex of head, eyes and lateral areas of pronotum dark fuscous or black, apical transverse striæ and basal margin to head and minute discal spots to pronotum sanguineous; scutellum and corium dull sanguineous, lateral area of the last, including cuneus, stramineous, membrane slate-grey, subhyaline; hody beneath and legs very pale ochraceous, basal joint of antennæ and lateral margins of sternum and abdomen sanguineous, first joint of antennæ scarcely longer than head, second more than twice as long as first; body finely pilose posterior tibiæ setose

Length 5 millim

Hab Ceylon, Feradeniya and Pundaluoya (Green) Swept from grass (E. E. Green)

c Posterior tais i mutilated in specimens examined

1375 Megacelum forsythi, Dist. (Calocoris) T. E. S. 1879, p. 125.

id (Calocoris) Sec. Yail. Miss., Rhynch. p. 10, f. 8 (1878).

Hoir (Calocoris) Termész Fuzetek, xii, p. 38 (1889)

Brownish testaceous, antennæ with the first joint not quite so long as head and pronotum, second slightly and gradually thickened towards apex, third pale luteous at base, fourth mutilated in specimen described, head with a deep central longitudinal incision between the eyes, pronotum rugulose, faintly anteriorly and more distanctly so towards posterior margin; hemelytra slightly pilose, somewhat paler towards costal margin, and with the extreme outer margin somewhat obscurely piceous; membrane pale fuscous, somewhat clouded, scutellum obscurely and transversely strigose, body beneath castaneous, anterior legs ochraceous, tibiæ with a longitudinal series of small brownish spots. Intermediate and posterior legs mutilated in specimen described.

Length 7 millim

Hab Kashmir (fide Howath). Punjáb: Murree (Stoliczka)

1376. Megacœlum hampsoni, sp n

Obscure sanguineous; pronotum, scutellum, lateral margins of corium, tibus and tarsi pale luteous, membrane dark fuliginous with a pale basal spot, apex of head, lateral areas of sternum, and apex of abdomen fuscous

A single specimen of this distinct species in mutilated condition, the above characters will distinguish it, and more initiate description must await the army alof specimens in latter condition.

must await the arrival of specimens in better condition.

Length 6 millim.

Hab Nilgiri Hills (Hampson).

1377. Megacolum picturatum, sp n

Head and pronotum ochraceous, eyes, lateral and subanterior and subbasal margins to pronotum black, anterior and basal margins to pronotum luteous, a subquadrate fuscous spot on each side of pronotal anterior area; scutellum luteous, its apex red; corium pale greyish-ochraceous, clavus and an irregular central transverse tascia tuscous, cuneus reddish; membrane pale fuliginous, legs luteous, apical halves of femora and the tarsi testaceous, apices of tarsi piceous; first joint of antennæ testaceous, second joint luteous with its apex testaceous (remaining joints mutilated in specimen described); head with a distinct narrow central longitudinal sulcation; pronotum obscurely punctate

Length 7 millim

Hab. Upper Burma; Goteik Gorge (Bingham, Brit. Mus).

Genus TANCREDUS, nov.

Type, T. sandaracatus, Dist.

Distribution. Ceylon.

Subelongate; head with a distinct central longitudinal impression on its basal half, the eyes prominent and touching the anterior, margin of the pronotum; antennæ with the first joint slightly thickened and about as long as the head, second joint about three times as long as the first, third about half as long as second; rostrum reaching the apices of the intermediate coxæ; pronotum punctate, broader than long, with a distinct but very nariow anterior collar, an obscure transverse constriction at about one-third from anterior margin, the lateral posterior angles distinctly

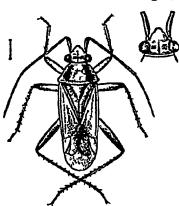


Fig 275 - Tancredus saudaracatus

prominent and subacute; scutellum subtriangular; corium with cuneus a little shorter than abdomen, clavus punctate and transversely striate; tibiæ setose.

1378 Tancredus sandaracatus, sp n

Pale strammeous; antenne, inner margins of eyes, a broad oblique fascia on each lateral area of pronotum, clavus (excluding inner margin), apical area of corium, abdomen beneath, posterior femora (excluding base), apices of anterior and intermediate

femora, and apices of posterior tibies sanguineous; tarsi infuscated, membrane very pale fuliginous.

Length 4 millim.

Hab. Ceylon; Kalutara (Green) Swept from grass (E. E. Green)

Genus COMBALUS, nov.

Type, C. novitius, Dist. Distribution. Assam

Body elongate, head short, broad, deflected anteriorly, with a distinct central longitudinal impression; eyes somewhat small, contiguous to the anterior margin of the pronotum; antennæ with the first joint long, a little shorter than the pronotum, second about twice as long as first and strongly setose (remaining joints mutilated in specimen described); rostrum passing the anterior coxæ; pronotum longer than half the width at base, coarsely punctate, with a very narrow anterior collar, behind which are two transverse callosities, lateral margins slightly sinuate; scutellum transversely foveate at base, glabrous, apex acute; corium smooth, shining, with a distinct impunctate margin, margins subparallel, a distinct foveation beyond apex of clavus, cuneus longer than broad, fracture indistinct; legs moderately short, femora not prominently incrassate.

1379 Combalus novitius, sp n

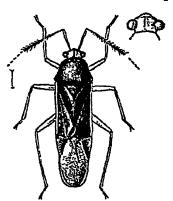


Fig 276 -- Combalus novitius

Black, shming; head, antenne, rostrum, coxe, legs, lateral margins of corium, and apparently (as seen in carded specimen) disk of abdomen beneath ochraceous; apex of second joint of antenne broadly black; head glabrous; pronotum coarsely punctate and subrugulose, scutellum very faintly transversely striate, corium pilose and very obsoletely punctate; cuneus castaneous, membrane shining fuliginous-brown.

Length 4½ millim.

Hab Assam; Margherita.

Genus DIOGNETUS, nov.

Type, D intonsus, Dist Distribution Ceylon

Somewhat broadly ovate, thickly pilose, head moderately deflected, with a deep, broad, longitudinal incision between eyes, which are broadly transverse, inwardly touching the anterior margin of the pronotum, but extending far beyond it, antennæ moderately slender, basal joint very slightly thickened, about as long as head, second joint a little more than twice as long as first, rostrum reaching the intermediate coxæ; pronotum punctate, the basal margin about three times the width of anterior margin.

432 CAPSIDA.

deflected anteriorly, the posterior margin a little sinuate, scutellum somewhat large, subtriangular, hemelytra a little outwardly convex, lateral margins slightly laminate, cuneus a little longer than broad, membrane considerably passing abdominal apex; legs of moderate length, tibiæ strongly setose.

1380. Diognetus intonsus, sp n.

Chocolate-brown, ochraceously pilose; extreme basal margin of

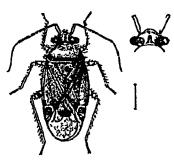


Fig 277.—Diognolus intonsus

pronotum and lateral marginal areas of corium ochraceous, eyes and a subbasal transverse fascia to pronotum black, cuneus bught castaneous, its basal margin flavescent, membrane pale fuliginous, its basal area and veins piceous, body beneath brownish - ochiaceous, legs pale ochraceous, femora annulated with brown, antennæ dark ochraceous, third joint strammeous, apices of second and third joints and the whole of fourth piceous.

Length 5½ millim. Hab. Ceylon; Maskeliya (Green).

Genus ZANESSA

Zanessa, Kull. Tr E. S 1902, p 209

Type, Z rubrovarregata, Kirk, an Australian species. Distribution Australasian and Oriental Regions.

Covered with short hairs, not pubescent, head centrally sulcate (not cannate as described by Kirkaldy), slightly transversely impressed at base; eyes globular, prominent, almost touching but passing in width the anterior margin of the pronotum; rostrum; extending to intermediate coxe. pronotum moderately constricted

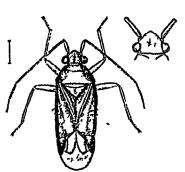


Fig 278.—Zanessa sanguinolenta

before iniddle, the lateral margins sinuated or nearly straight, base little emarginate, scutellum subtriangular, slightly antennæ moderately robust, first joint about as long as head, stoutest, second rather more than twice us long as first, legs of moderate length, slender, very finely pilose.

1381. Zanessa sanguinolenta, sp n

Ochraceous, basal joint of antennæ, eyes, lateral areas of pronotum, inner area of clavus, subclaval and lateral areas of corium, cuneus (excluding base), and membranal veins sangumeous; body beneath and legs ochraceous; head distinctly longitudinally impressed or sulcate, transversely impressed, and also distinctly transversely carinate near base; pronotum and scutellum impunctate; membrane very pale fuliginous; scutellum with a faint longitudinal central darker line.

Length 5½ millim.

Hab. Utakamand (Atkinson Coll., Brit. Mus)

Division CYLAPARIA.

Valdasaria, Dist Biol. Centr-Am, Rhynch i, p 242 (1883) Monalomonaria, Reut Ann Soc Ent Fi lxi, p 398 (1892) Eucerocoraria, Kirk J Bomb N H Soc 1902, p 294. Cylaparia, Kirk Wien ent Zeit xxii, p 13 (1903), Dist. A M. N H (7) xiii, p 107 (1904)

The name of this division was founded on that of the Neotropical genus *Valdasus*, Stâl, which has since been proved to be a synonym of the older genus *Cylapus*, Say. As the name *Valdasus* no longer exists as a generic cognomen, it is necessary to alter the divisional name as above.

This division includes a series of genera in which the head is truncated or deflected, not produced in front of eyes, and always, though frequently obscurely, sulcated, and sometimes more correctly to be described as excavated, the antennæ are inserted well in front, but on a level with the inner margin of the eyes. The species thus comprised are of a more robust character than those of the Miraria, and their coloration is bright and handsome, thus resembling those of the following division

Synopers of Genera

A Eyes broad, transverse, somewhat contiguous on disk of head

B Eyes of ordinary size and placed wide apart a Pronotum with a single anterior transverse

constriction
a First joint of antennæ longer than head,

but shorter than pronotum.
b First joint of antennæ as long as head and pronotum together

b Pronotum with two anterior transverse constrictions

a Head transverse, short, eyes near to, but well separated from, anterior margin of pronotum

a' First joint of antennæ globosely incrassate at base, second joint about twice as long as first

b' First joint of antenna not incrassate at base, second joint about half as long again as first PHARYLLUS, p 434

ARGENIS, p 434

Несорестия, р. 489

Guisandus, p 436.

PRODROMUS, p 436

b Head long, transverse anteriorly, narrowly elongated posteriorly, eyes remote from anterior margin of pronotum and inserted near bases of antennæ.

a'. Pronotum coarsely punctate, corium opaque

Angerianus, p 437

b'. Pronotum not or remotely punctate, corium hyaline

FELISACUS, p 438.

Genus PHARYLLUS, nov.

Type, P. pistacinus, Motsch

Distribution. Ceylon

Subelongate; head broad with a central longitudinal impression, deflected in front of eyes, which are very large and transverse and well separated from anterior margin of pronotim; antennæ with the first joint longer than head, second rather more than twice the length of first, rostrum mutilated in specimen examined, pronotum with a very narrow anterior collar, transversely impressed before middle and enclosing two transverse nodulosities, lateral margins almost obliquely straight, basal margin truncate, slightly recurved at lateral angles, scutellum a little tumid, its apex subacute; comum opaque, cuneus longer than broad with an acute fracture, posterior tibiæ long, setose.

1382. Pharyllus pistacinus, Motsch (Leptomerocoris?) Bull Soc Nut Mosc xxvi (2) p. 85 (1863)

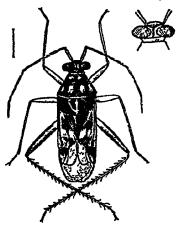


Fig 279 -Pharyllus pistacinus

Dark purplish-brown; extreme basal margin and two (sometimes four) discal spots to pronotum, lateral margins, apex, and a central line to scutellum, a spot before middle and two transverse fasciate spots before apex of corium, coxe, trochanters, anterior and intermediate legs, bases of posterior femora, tarsi and base of abdomen beneath ochraceous; membrane fuliginous, anterior and intermediate tibiæ finely setose, posterior tibiæ longly setose

Length 6½ millim. Hab. Ceylon, Colombo (Green)

Genus ARGENIS.

Argenis, Dist A M N. H (7) xiii, p 107 (1904)

Type, A. incisus atus, Walk

Distribution Ceylon.

Head broad, not horizontally produced in front of eyes, which

touch the anterior margin of the pronotum, but exceed it in width, distinctly longitudinally centrally impressed or very finely sulcate, antennæ with the first joint longer than head but shorter than pronotum, second joint almost twice as long as first, third joint about one-third shorter than second; eyes large, globose; pronotum coarsely punctate, transversely constricted before middle, posterior lobe tumid, centrally very obscurely carinate, posterior angles subprominent and a little tuberculous; scutellum triangular, the apex somewhat acute; corium long, cuneus passing apex of abdomen, membrane somewhat small; body beneath obscurely seen owing to typical specimen being in a carded condition; legs of moderate length; posterior femora scarcely thickened.

1383 Argenis incisuratus, Walk. (Capsus) Cat. Het. vi, p. 121 (1873); Dest. A M N H. (7) xii, p 107 (1904)

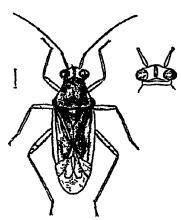


Fig 280 -Argenis incisuratus

Head ochraceous, the central impression and eyes fuscous; pronotum brownish-ochraceous, the obscure central longitudinal carina and two broad oblique discal fasciæ piceous, posterior lateral angles black; scutellum brownishochraceous, its apex luteous; corium luteous: clavus, a subclaval fascia extending to interior angle, a basal lateral spot, a small elongate discal spot a little beyond middle, and apical margin of cuneus piceous-brown; membrane pale brownish, subhyalme, antennæ with first joint luteous, remainder fuscous; legs and body beneath imperfectly seen owing

to the carded condition of the typical specimen Length 4 millim

Hab Ceylon (Thwaites & Green)

1384. Argenis alboviridescens, sp. n.

Head, antennæ, pronotum, and scutellum black; base of first joint of antennæ, anterior pronotal collar, posterior lateral angles of pronotum, and the corium creamy-white, the last with a very slight virescent tinge; membrane pale hyaline; body beneath piceous-brown, legs pale luteous, body elongate; head strongly centrally sulcated, obscurely punctate, and with two subobsolete discal pale spots; posterior lobe of pronotum somewhat coarsely granulate, with two distinct nodosities on anterior area, the posterior lateral angles subnodulose; margins of clavus and sublateral margins of corium linearly finely punctate

YOL II.

Var. Antennæ fuscous-brown, apices of first and second joints piceous, posterior area of pronotum brownish-ochraceous, not black.

Length 4½ to 5 millim. Hab. Ceylon (Green, Brit. Mus.).

Genus GUISARDUS, nov.

Type, G. pellucidus, Dist. Distribution. Tenasserim.

Subelongate; head broad, perpendicularly deflected in front of eyes, centrally medially depressed and shortly finely longitudinally sulcate, eyes large, prominent, well separated from anterior margin of pronotum; antennæ with the first joint longer than head and distinctly globosely incrassated at its base, second joint about twice as long as first, rostrum reaching the intermediate coxæ; pronotum longer than broad, doubly constricted on anterior area, with two central discal curved carinæ, the lateral posterior angles nodulose, the basal margin concavely sinuate; scutellum a little tumid, centrally linearly impressed; hemelytra subhyaline, cuneus longer than broad.

1385 Guisardus pellucidus, sp n

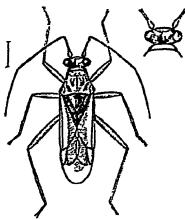


Fig 281 —Guisardus pellucidus

Head, pronotum, scutellum, body beneath and legs very pale ochraceous; antennæ (excluding basal joint), eyes, lateral margins and posterior lateral angles of pronotum, and a central basal spot and apex to scutellum black; apical margin of corium, margins of cuneus, and veins to membrane piceous; posterior area of pronotum tumid, transversely rugulosely striate and centrally longitudinally incised on disk; clavus moderately infuscated.

Length 6 millim.

Hab. Tenasserim; Myitta (Doherty).

Genus PRODROMUS, nov.

Type, P. subflavus, Dist.

Distribution Ceylon and Tenasserim.

Elongately subovate; head broad, medially depressed and centrally longitudinally impressed, eyes prominent and well separated from anterior margin of pronotum; antennæ with the first joint a little longer than head, second about half as long again as first; rostrum passing the intermediate coxæ: pronotum with a narrow anterior

collar, transversely constricted before middle and enclosing two transverse callosities, posterior area tumid, coarsely punctate, the basal margin concavely sinuate, the lateral posterior angles subnodulose, scutellum subtriangular, a little tumid; hemelytra

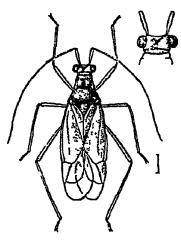


Fig 282.—Prodromus subflatus

moderately concavely ampliated, cuneus longer than broad, the fracture distinct, legs of moderate length.

1386 Prodromus subflavus, sp n

Head, pronotum, scutellum, clavus, and body beneath pale ochraceous, corium, legs, and antennæ pale stramineous, apex of second joint of antennæ piceous; membrane pale hyaline; pronotum, excluding the nodulosities and anterior collar, coarsely punctate; scutellum and clavus punctate.

Length 41 millim.

Hab Ceylon, Peradeniya (Green).

1387. Prodromus clypeatus, sp n.

Stramineous; apex of second joint of antennæ piceous; eyes and scutellum, excluding basal margin, black, inner margin of clavus ochraceous; corium finely and obscurely pilose

Allied to P. subflavus, but differing by the black and shining scutellum, and otherwise by the uniform pale strammeous coloration.

Length 5 millim.

Hab. Tenasserim , Myitta (Doherty).

1388. Prodromus subviridis, sp. n

Very pale greyish-green; a black spot on abdomen above near apex of scutellum, imperfectly seen through the pale hemelytra, apex of second joint of antennæ brown, eyes piceous, body above finely and obscurely greyishly pilose

Length 4 millim.

Hab Tenasserim; Myitta (Doherty).

Genus ANGERIANUS, nov.

Type, A fractus, Dist. Distribution Tenasserim.

Subovately elongated, head very broad between eyes, anteriorly perpendicularly deflected, medially longitudinally impressed,

2 G 2

transversely impressed behind eyes and narrowed to base; eyes somewhat small and very longly removed from anterior margin of pronotum; antenna with the basal joint a little longer than head, rostrum lobust, the apical joint slender; pronotum coarsely punctate, with a very narrow anterior collar and two anterior transverse constrictions which give the appearance of two very short lobes together shorter than the posterior lobe, which is moderately tunid, the posterior lateral angles subprominent, the basal margin subtruncate; scutellum small, tunid, transversely foveate at base; hemelytra with the lateral margin of corium a little convex, the cuneus longer than broad, its fracture very profound; legs of moderate length.

1389 Angerianus fractus, sp. n.

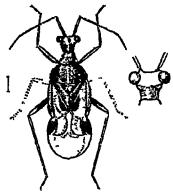


Fig 283 -Angerianus fractus

Piceous; antennæ, head between eyes, a central longitudinal fascia to posterior pronotal lobe, a central spot to scutellum, corium (excluding clavus), apical joint of rostrum, coxæ, trochanters, and legs pale ochraceous; base of first joint of antennæ, a subclaval and posterior lateral spot to corium, cuneus (excluding base), and central area of femora, piceous; membrane pale hyaline, the venation piceous, pronotum coarsely punctate, clavus and basal area of corium more finely punctate

Length 31 millim.

Hab. Tenasserim; Myitta (Doherty)

1390. Angerianus maurus, sp n

Black; antennæ, excluding basal two-thirds of first joint, head between eyes, basal lateral margin of corium, and legs pale ochraceous; femora (excluding base) and bases of tibre black, base of cuneus narrowly pale ochraceous; membrane pale hyaline, the venation piceous; pionotum coarsely punctate, corium shining black.

Length 3 millim.

Hab. Tenasserim; Myitta (Doherty).

Genus FELISACUS, n. nom.

Liocoris, Motsch Bull Soc. Nat. Mosc xxxvi (3) p. 86 (1868), nec Liocoris, Fieb (1859)

Type, F. glabratus, Motsch.

Distribution Ceylon and Tenasserim.

Elongate; head long and broad, transversely constricted behind eyes, somewhat strongly and broadly sulcately excavate between eyes, which are moderately prominent and inserted at or near the

antennal tubercles, remote from base; rostrum reaching the posterior coxe; antennæ with the first joint stoutest and about as long as the pronotum, second a little longer than the third; pronotum posteriorly convexly tumid, strongly constricted before middle, and with a very narrow anterior collar, posterior angles subnodulose; scutellum small, subtriangular; hemelytra hyaline; cuneus somewhat long and slender; membrane with a single basal cell; legs of moderate length and slender.

1391. Felisacus magnificus, sp n

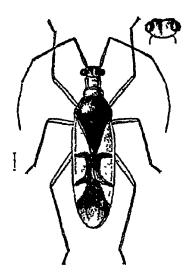


Fig 284.—Felisacus magnificus

Head, first joint of antennæ, anterior lobe and collar of pronotum pale sangumeous or reddish - ochraceous; corium pale hyaline; posterior lobe of pronotum, scutellum, clavus, two transverse fasciæ to corium inwardly connected, membrane, eyes, second and remaining joints of antennæ, and meso- and metasterna black or piceous; apical margin of membrane pale hyaline; head with two lateral dark sanguineous lines behind each eye, posterior tibiæ sometimes fuscous; posterior lobe of pronotum very finely and obsoletely punctate and with a transverse series of coarser punctures at the anterior constriction

Length 4 millim.

Hab Tenasserim; Myitta
(Doherty)

1392. Felisacus glabratus, Motsch (Liocolis) Bull Soc Nat Mosc xxxvi (2) p. 87, tab u, f 20 (1863)

Dark ochraceous; hemelytra pale hyaline, the veins piceous. antennæ (excluding basal joint), eyes, and an oblique linear spot near apex of clavus black, coxæ and bases of femora very pale strammeous; inner margin of cuneus pale ochraceous; head, pronotum, and scutellum shining, glabrous; tarsi fuscous.

Length 4 millim

Hub Ceylon; Peradeniya, Diyatalawa (Green)

Genus HELOPELTIS.

Helopeltis, Signoret, Ann Soc Ent. Fi (3) vi, p 502 (1858) Aspicelus, Costa, Ann Mus Zool Nap ii, p 147 (1865)

Type, H. antonu, Sign.

Distribution Oriental and Ethiopian Regions.

Body elongate; head broad, deflected in front of eyes, discally

and centrally longitudinally incised or sulcated; antenna inserted in front of but on a level with the inner margin of the eyes, with the first joint about as long as the head and pronotum together. its apex moderately incrassated, pronotum strongly constricted before the middle, posterior margin more than twice the width of anterior, scutellum with a long more or less erect horn or spine, its apex clavate; legs moderately long and slender, femora nodulose.

All the species known are destructive pests to plants, and some attacking tea are formidable enemies to plantations.

a Scutellar horn nearly straight and perpendicular.

1393. Helopeltis antonii, Sign. Ann Soc Ent. F) (3) vi, 1858, p 502; Waterh Tr. Ent Soc 1886, p 458, pl xi, f. 4; Trimen, Nature, xxx, p. 615 (1884).

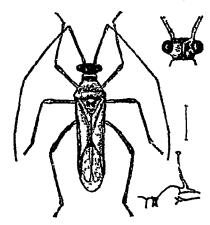


Fig 285 — Helopeltis antonii.

Head and pronotum black, anterior margin pronotum narrowly obscurely ochraceous, rostrum obscure ochraceous, more or less suffused with fuscous, prominently so at apex; antennæ shining piceous. ochraceous at base; scutellum black, testaceous at apex; hemelytra pale ohvaceous-fuscous; legs brown, speckled with ochraceous; bases of femora distinctly ochraceous; abdomen beneath luteous, with a basal spot and the apex black, scutellar horn nearly straight and perpendicular.

2. Pronotum and most of the scutellum purplish-red, the transverse constriction to the first sometimes piceous.

Length 6 to 7½ millim.

Hab Ceylon (Green). Tenasserim; Myitta (Doherty).

According to the late Dr. Trimen, this insect causes serious damage on cacao-plantations.

b Scutellar horn more or less distinctly curved backwards

1394. Helopeltis theivora, Waterh Tr E. S 1886, p 458, t. xi, f 3, Moore, med. P Helopeltis febriculosa, Bergi Ent Month. May. xxv, p 271 (1889).

d. Head and pronotum shining black, much resembling the same sex of the preceding species (H. antonn), but with the scutellar horn more curved backward at apex.

2. Black, pronotum bright shining stramineous or ochraceous,



442 CAPSIDÆ.

Genera and Species unknown to the writer, but apparently to be included in the Miring.

Genus EBLIS.

Eblis, Kirk Tr. E S 1902, p 256

Type, E amasis, Kırk

Distribution British India.

"Pronotum and elytra finely punctured; head strongly declivous, vertex obsoletely sulculate, clypeus scarcely elevated; head between eyes about equal to that of an eye, interior margin of the latter not sinuately emarginate, apically divergent, rostrum reaching beyond posterior coxe; head and pronotum immarginate, antennæ longer than total length of body, membrane glabrous.

"Allied to Capsus, Fabr., but differs by the elongate slender

antennæ and by the pronotum, narrower apically."

1396 Eblis amasis, Kn l. T. L S 1902, p 256, pl. vi, f. 10 (side view of head only).

"Bronzy-black; head, pronotum, and scutellum (elytra sparsely) with silvery pubescence; anterior and intermediate tibiæ, all coxæ, apical half of posterior tibiæ, stink-gland orifices, third and fourth segments (joints) of antennæ pallid; first segment (joint) of antennæ about equal to length of pronotum, the former somewhat incrassate, second segment (joint) 2½ longer than first, ½ to ½ longer than third, and a little more than twice as long as fourth; base of pronotum twice as wide as collar; posterior femora somewhat incrassate; tibiæ about one-third longer than femora.

"Length (including elytra) 7 to 8 millim

"Hab. Kangra Valley (4500 ft , Aug 1899, Dudgeon)"

The type is at present with the describer in the Sandwich Islands, and therefore not available for comparison.

Genus CHILOCAPSUS.

Cherlocapsus, Knk Tr E S 1902, p 259

Type, C. flavomarginatus, Kirk.

Distribution. Burma.

"Vertex feebly marginate near the base; clypeus vertical, prominent, extending beyond vertex; eyes prominent, anterolaterally sinuately emarginate, oblique, together wider than vertex, remote from pronotum, rostrum extending to intermediate coxe; pronotum with a well-marked collar, obsoletely callose behind the latter, lateral margins a little sinuately divergent posteriorly, 2\frac{3}{6} wider at base than at apex, subrugose transversely, posterior margin subrotundately truncate; elytra subrugose-punctate, extending beyond apex of abdomen, the larger membranal area angular apically; cuneus very elongate

"Somewhat remotely allied to Hyalopeplus, Stal, but at once separable by the opaque elytra and differently formed pronotum"

In the specific description we read "Head with a slight longitudinal sulcus," which locates the genus in the Mirinæ.

1397. Chilocapsus flavomarginatus, Kuh Ti E. S 1902, p 259, pl. vi, f 9 (outline of head only)

"Clothed with short, black, bristly hair; head, pronotum, extreme base of scutellum, legs and ventral surface dull flavous, exocorium, cuneus (except black interbasal angle and extreme apex) bright flavous; antennæ sanguneous, apex of second segment (joint) blackish, eyes, lateral margins (narrowly) of pronotum, scutellum, elytra, membranal nervures, &c, black; membrane cinereo-hyaline; posterior femora with four small black spots; dorsum of abdomen sanguneous, head with a slight longitudinal sulcus; first segment (joint) of antennæ sub-incrassate, subequal to pronotum in length, a trifle longer than cuneus, second a little more than twice as long as the first; first segment (joint) of anterior tarsi longer than second and third together."

Length 11 millim

Hab. Burma; Shan Yoma

The type is at present in the Sandwich Islands, and therefore not available for comparison

Subfamily II. CAPSINÆ

The Capsine may at once be distinguished from the Mirine by the non-sulcated head, and from the Isometopine by the absence, or practical absence, of ocelli This is by far the largest section of

the family, and contains the typical genera of Capsidæ

I place three genera at the commencement of this subfamily which do not strictly appertain to any particular Division, and two of which have a considerable superficial resemblance to genera in the Mirine—Displancials to Helopelius, and Hyalopeplus to Calliciatides,—but the character of the non-sulcated head sufficiently distinguishes them. It is inadvisable to found a Division when represented by only a single genus, and each of the three here enumerated might be used for that purpose

Genus DISPHINCTUS

Disphinctus, Stal, Ofv Vet.-Al. Forh 1870, p 668

Type, D fallen, Stal, from the Philippines Distribution. Oriental and Malayan Regions

Body elongate, head small, with eyes considerably broader than the anterior margin of the pronotum, truncately deflected before, constricted behind eyes, which are large and prominent, rostrum extending beyond the anterior covæ; antennæ long, slender, and (excluding basal joint) pilose, first joint incrassated, slender at base, second joint longest, three or four times the length of first; pronotum anteriorly narrowed, nearly three times broader at base than at apex, prominently constricted a little before middle and again near anterior margin, scutellum unarmed, moderately convex, sometimes with a faint central sulcation, hemelytra parallel, longly passing abdominal apex; legs of moderate length, pilose, posterior femora slightly incrassated

1398. Disphinctus humeralis, Walk. (Monalonion) Cat Het vi, p 162 (1873), Bergi (Disphinctus) Ent. Month Mag. xxi, p 271 (1889)

Head, pronotum, sternum, rostrum, and legs ochraceous, antennæ, eyes, a large spot on each side of posterior lobe of

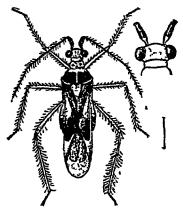


Fig 286 -Disphincips humeralis

pronotum, bases and apices of posterior femora, posterior tibiæ (excluding apices), meta-and sometimes mesosternum, two submedial transverse fasciæ to audomen beneath, and apex of same black; abdomen beneath strammeous, base of first joint of antennæ luteous : scutellum very pale strammeous, hemelytra brownish-ochraceous, base, lateral margin, obscure transverse suffusion near inner angle and apex of cuneus fuscous; membrane pale fuscous, the veins darker.

Length 8½ millim

Hab Sikhim (Brit. Mus.). Ceylon; Kandy, Peradeniya (Green)

Tenasserim; Myitta (Doherty) - Malacca (Brit Mus); Siamese Malay States (Annaldale & Robinson).

Recorded as attacking cinchona at Mungphu in Sikhim (At-

kınson)

1399. Disphinctus politus, Walk (Monalonion) Cat Het. vi, p 163 (1873)

Disphinctus formosus, Kirk J Bomb N H. Soc xiv, p 295, pl A (p 46), f 10, pl C, f 2 (1902), Green, Entomologist, 1901, p 114, & p 115, ff 3 & 4 (eggs)

Dark shining ochraceous, antennæ (excluding basal joint), eyes, an irregularly-shaped spot at apex of corium before cuneus, and posterior fibiæ and tarsi, the first excluding base, black, abdomen beneath strammeous, a little infuscated at apex, body finely pilose, antennæ (excluding basal joint) and the legs longly pilose

Var. a Posterioi tibiæ ochraceous, concolorous.

Length 8½ to 11 millim

Hab. Assam, Margherita (Brit. Mus), Kangra Valley (Dudgeon) Ceylon; Peradeniya, Kandy, Badulla (Green) Tenasserim, Myıtta (Doherty) —Borneo, Sarawak (Brit. Mus)
Mr. E E Green ('Entomologist,' 1901, p. 114) describes this

species as abundant in Ceylon on plants of Cuphea jorullensis. The young shoots are badly punctured and wilted, and the plants completely disfigured, the damage being done chiefly by the immature insects. Mr. Green also informs me that D. politus punctures leaves of Solanum sp., young leaves and shoots of Peperonia sp., young leaves of common guava (Psidium guyava), and young leaves of Acalypha sp.

- 1400. Disphinctus dudgeoni, Kirk. J. Bomb N. H. Soc. xiv, p 296 (1902)

 Gen ⁹ sp. ⁹, Dudy Ind Mus Notes, iii (v) p 37 (1894).
- of "Orange-red, abdomen broad and concave on the upper side, unmarked; head transverse, short; eyes black and prominent; rostrum paler orange, thickened for the basal third of its length, rather short reaching just beyond the coxe of the anterior legs when folded beneath; antennæ almost the same length as the whole body, first joint thickened, short, reddish, second long, third shorter than second, fourth short, all three black, pronotum and scutellum unmarked, orange-red, the former lengthened, legs pale, semihyaline yellow, barred with orange-red on the femora, the bases of the tibiæ also reddish, hemelytra with the corium orange-red, with a triangular black spot on the costa. membrane fuscous hyaline with a discal nervure orange"

9 "Only differs from the male in being slightly paler in colour and in the underside of the abdomen having a curved corneous, black, shining ovipositor, as in *Helopettis theiron a.*"

Length 9½ to 10 millim.

Hab. Sikhim and Bhutan, from 1500 to 5000 feet (G. C.

Punctures leaves of plants of the genus Mæsa (M. montana, M. namentacea, and M. indica), occurring in the Darfiling district.

I have not seen this species.

1401 Disphinctus elegans, sp n

Q. Head, pronotum, scutellum, cuneus, rostrum and sternum orange-red, corium reddish-brown; membrane pale shining fuscous; abdomen beneath stramineous, base, apex, and lateral margins (above and beneath) to abdomen, antennæ and eyes black; posteriol legs stramineous, apical areas of femora, basal areas of tibiæ, and the tarsi black, anterior and intermediate legs mutilated in specimen described; corium thickly greyish pilose, legs and antennæ longly pilose.

Length, Q, 81 millim.

Hab Tenasserim, Myitta (Doherty)

1402 Disphinctus mæsarum, K11% J Bomb N. H Soc xiv, p 295 (1902)

Head, antennæ, and pronotum black; central area of head between eyes, basal margin, collar, and sometimes anterior lobe 446 CAPSIDÆ.

of pronotum, and scutellum ochraceous or strammeous; lateral margins of scutellum black; corium dull ochraceous or stramineous. basal and apical areas piceous; cuneus stramineous; membrane pale fuliginous; body beneath and legs ochraceous or stramineous. apices of posterior femora blackish, antennæ and legs longly pilose, extreme base of first joint of antennæ luteous

Var. a. Sternum, apex of abdomen, bases and apices of posterior

femora, posterior tibiæ and the tarsi black.

Length 61 to 81 millim.

HabCeylon; Pundaluoya (Green). Tenasserm. Mvitta (Doher tu).

Punctures leaves of Mæsa indica (Green).

Genus MALALASTA, nov.

Type, M. superba, Dist Distribution. Tenasserim.

Body elongate; head subglobose, vertically deflected in front; eyes of moderate size, almost touching anterior margin of pronotum; antennæ inserted in front of anterior margins of eyes, first joint about as long as head and pronotum together, slightly thickened at apex, second joint about half as long again as first; costrum reaching the intermediate coxe, pronotum with an anterior collar, behind which are two transverse callosities centrally united, posterior area strongly punctate, with a faint central

> longitudinal ridge, scutellum rathei large, subtriangular, its apex broad, hemelytra subhyaline, legs somewhat long and slender, cuneus long

and slender.

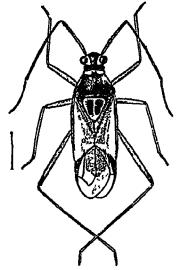


Fig 287 —Malalasta superba

1403. Malalasta superba, sp n.

Head, pronotum, and scutellum black, an elongate spot at inner margin of each eye, the transverse callosity and an elongate spot on the lateral margins of pronotum, margins, a central fascia and apex of scutellum, head beneath (excluding a central black fascia), acetabula, coxæ, legs, and abdomen beneath stramineous or very pale ochraceous, abdomen with black transverse spots on each side, anterior margin of penultimate segment and some apical spots black; apices of posterior temora, extreme

bases and a central annulation to posterior tibie, the antennæ, and venation to hemelytra fuscous-brown; extreme base of first joint of antennæ and third joint (excluding apex) stramineous; pronotum

and scutellum, excluding pale markings, coarsely punctate; apex of scutellum broad and a little tumid

Length 8 millim

Hab. Tenasserim; Myitta (Doherty).

Genus HYALOPEPLUS.

Hyalopeplus, Stal, Ofv Vet -Al. Forh 1870, p 670

Type, H. vitripennis, Stal.

Distribution Oriental and Australasian Regions

Body oblong, head triangular, with eyes much broader than anterior margin of pronotum; eyes strongly prominent; antennæ inserted in front of eyes, basal joint moderately incrassated, subequal in length to head, 'second joint nearly four times as long as first; rostrum reaching the posterior coxæ; pronotum slightly shorter than broad, narrowed anteriorly, basal margin twice as broad as anterior margin, twice transversely impressed, near anterior margin forming a sort of collar, and again before middle, the last constriction being waved; scutellum tumid, the disk subdepressed, longitudinally sulcate; hemelytea parallel smooth, hyaline, corium with cuneus reaching apex of abdomen, membrane with two cellular areas; legs of moderate length, posterior femora moderately incrassated.

1404. Hyalopeplus vitripennis, Stål (Capsus), Freg Eug Resa, Ins p 255 (1859); vd. Öfv Vet-Ak. Forh 1870, p 671 Capsus lineifer, Walk. Cat Het vi, p 122 (1873) Hyalopeplus lineifer, Kuk. Ti, E S 1902, p. 253

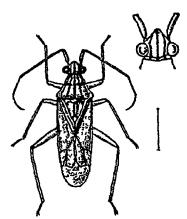


Fig 288.—Hyalopeplus vitripennis

Luteous; head with three, and pronotum with five longitudinal lines either red or black; scutellum with a central line similarly variable in colour; basal margin of pronotum black; antennæ luteous, sometimes (excluding basal joint) fuscous; hemelytrapale ochraceous hyaline, the venation piceous; apex of scutellum more or less castaneous;

Length 9 to 10 millim.

Hab. Assam; Margherita (Doherty). Ceylon (Lewis) Tenasserim; Myitta (Doherty) — Malacca (Brit Mus.), Java, Philippines. North Queensland (Dodd).

1405. Hyalopeplus spinosus, sp n.

Allied to H. vitripennis, Stal, but differing principally in the

448 CAPSIDÆ.

pronotal angles, which are distinctly spinously produced, and with their apices a little directed backward; the fourth joint of antennæ is pale luteous with its apex piceous, the pronotum has a subbasal transverse black marginal line, but the longitudinal fasciæ are indistinct, only three in number, the central one continuous, indistinct and fuscous, the other two red, but not extending beyond the anterior area

Length 9 millim.

Hab. Assam; Margherita (Doherty)

Division PHYTOCORARIA.

Phytocorana, Reut Bih Vet-Ah Handl iii (1) p 6 (1875), id. Acta Soc Faun & Flora Fenn i, p. 35 (1875)

In this division the head is neither longitudinally sulcated nor impressed, the brachial vein to the hemelytra is distinct, the cuneus elongately triangular but the fracture not profoundly exhibited; the pronotum very obsoletely punctate, sometimes transversely rugose.

Synopsis of Genera.

A Antennæ with the first joint thickened and shorter than pronotum, second joint incrassate at apex

B Antennæ with the first joint as long as pronotum or very little shorter,

a Body pubescent, first joint sparingly
hirsute

b Body not pubescent, first joint not hirsute

Panacaloconis, p 449

Phyroconis, p 448

CALOCORIS, p 451

Genus PHYTOCORIS.

Phytocoris, Fallén (part), Hem. Suec. p 83 (1829); Herr.-Sch. Wanz Ins. m, p 36 (1835); Fieb Eur Hem pp 65, 258 (1861), Reut. Bih Vet-Akad Handl m (1) p 10 (1875)

Type, P. ustulatus, Herr.-Sch, a Palæarctic species. Distribution Probably of universal distribution.

Body subelongate; first joint of the antennæ sparingly hirsute on its inner margin, and about as long as the pronotum, rostrum extending beyond the base of the abdomen, body opaque, somewhat densely pubescent; eyes large, prominent; pronotum trape oidal, with a distinct anterior collar; scutellum tumid, hemelytra more or less parallel; membrane pale fuliginous, irrorated with paler coloration; legs elongate, the posterior pair longest, with the femora moderately thickened; tibiæ setose

1406 Phytocoris crinitus, sp n

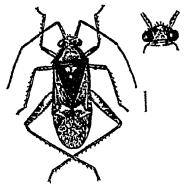


Fig 289 -Phytocoris crinitus

Brownish-ochraceous, thickly tomentose; lateral and posterior margins of the pronotum, a central basal fascla to scutellum. clavus, corium, and cuneus fuscous, corrum with central and apical paler suffusions; membrane pale fuliginous mottled with grey, the veins fuscous; body beneath fuscous, coxæ and legs pale greyish-brown, apical areas of the femora mottled with fuscous, tibiæ annulated with fuscous, antennæ brown, speckled and annulated with greyish, first joint as long as pronotum,

second about twice as long as first; rostrum considerably passing posterior coxe.

Length 4½ millim

Hab Ceylon; Peradeniya (Green).

1407. Phytocoris stoliczkanus, Dist Tr E S 1879, p. 124, id Sec Yark Miss, Rhynch p 10, f 6 (1879)

Uniform pale ochraceous, head with a V-shaped mark consisting of small transverse strice commencing from near base of antennæ, of which the first joint is almost as long as head and pronotum together; pronotum with two slightly laised transverse callosities extending across and occupying the anterior area; scutellum with the base somewhat raised and gibbous, a waved transverse cordate line near base, and a faint pale longitudinal median line near apex; hemelytra sparingly clothed with a few minute blackish hairs; membrane with bright prismatic reflections.

Length 6 millim.

Hab. Punjab, Murree (Stoliczka).

Genus PARACALOCORIS.

Paracalocoris, Dist Biol Centi -Am, Rhynch 1, p 263 (1883)

Type, P. jurgiosus, Stål, a Neotropical species.

Distribution Neotropical, Ethiopian, and Oriental Regions

Body above distinctly pilose; antennæ with the basal joint incrassated, shorter than the pronotum, thickly clothed with fine long hairs, second joint about twice as long as first, its apex distinctly incrassate, third and fourth slender, and together subequal to or longer than the second, fourth generally a little longer than the third, pronotum distinctly subgibbous, the width at posterior angles being about three times that of anterior margin; rostrum reaching the intermediate coxæ. Pronotum usually with two discal subexcavated spots.

1408. Paracalocoris burmanicus, sp n.

Head, pronotum, and scutellum ochraceous; head suffused with

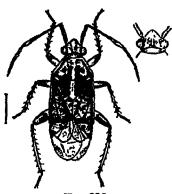


Fig 290
Paracalocoris burmanicus

brownish on the lateral areas. pronotum with two central and two sublateral fuscous fascize united at base, and with two small transverse spots near anterior margin and two rounded discal spots black; scutellum with a broad fuscous fascia on each lateral area, corium fuscous. thickly ochraceously pubescent, cuneus castaneous, its apex and a spot near inner angle black, membrane pale fuliginous and subhyaline, the venation and some apical linear marks black, body beneath ochraceous: a central and lateral spots to mesosternum and a sublateral series

of small spots to abdomen black; femora ochraceous, with their apices broadly black, tibiæ and tarsi black, the first with a central ochraceous annulation; antennæ piceous, extreme base of second joint and bases of third and fourth joints strammeous.

Length 6 millim.

Hab. Burma; Karennee (Fea)

1409. Paracalocoris erebus, sp n

Black, opaque, finely ochraceously pubescent; head with a small black spot in front of eyes, which are greyish-white; pronotum with two transverse black spots on anterior area and two obscure spots on disk; cuneus castaneous, its base and apex black, membrane subhyaline, its venation and a linear subapical spot black, its apical margin fuliginous; body beneath brownish-ochraceous, sternum piceous, a lateral spot to mesosternum and a sublateral series of small spots to abdomen black; legs black, bases of femora and central annulation to fibiæ stramineous, antennæ piceous, base of third joint stramineous.

Length 4½ millim

Hab. Burma; near Rangoon.

1410. Paracalocoris lanarius, sp u

Dull pale ochraceous, greyishly pilose; antennæ, eyes, two discal spots to pronotum, a small spot at each basal angle of scutellum, and small spots at base and apex of cuneus black, basal half of second joint of antennæ and third joint (excluding base) purplishred, extreme base of second and base of third joint greyish-white, head and collar of pronotum uniformly greyishly pilose; pronotum greyishly pilose, with two central curved fuscous tasciæ; scutellum

with the disk glabrous, corium and clavus strongly greyishly-pilose; membrane very pale fuliginous, with venation black; body beneath and legs pale ochraceous, the legs darkest; mesonotum (slightly, perhaps accidentally, exposed in typical specimen) exhibiting two large discal fuscous spots; abdomen beneath with a submarginal segmental series of linear fuscous spots.

Length 4 millim

Hab. Ceylon; Peradeniya (Green).

Genus CALOCORIS.

Oalocors, Freb Wien ent. Monatsb Bd 11, p 305 (1858), id Eur. Hem pp 65, 251 (1861); Reut Bih Vet-Al Handl. 11, p. 11 (1876), Saund Hem Het Brit Islds p 288 (1892) Subz Closterotomus, Freb Eur Hem pp 65, 261 (1861) "Dereocoris, Dougl & Scott, Brit. Hem p 315 (1865)

Type, C. lincolatus, Goeze, a Palmarctic species

Distribution. Probably nearly universally distributed, though

not yet recorded from the Ethiopian Region

Body elongate, head inserted to the eyes, rostrum extending beyond the intermediate but not passing the posterior coxe, antennæ variable, with the basal joint shorter than the pronotum or about the same length; pronotum convexly deflected anteriorly, with a narrow raised collar; scutellum moderately tumid; hemelytra with the margins parallel or sometimes slightly rounded; tibiæ setose.

411 Calocoris lineolatus, Goeze (Cimex, Ent. Beytr. 11, p 267 (1778); Reut. Act Soc Sc Fenn. xv, p 262 (1888), et syn. Lygæus chenopodii, Fall Mon Cim p 74 (1808) Calocoris chenopodii, Dist Sec Yark Miss, Rhynch. p 10 (1879), Saund Hem Het Brit Islds. p 243 (1892)

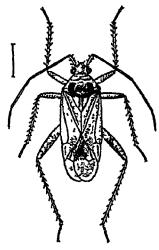


Fig 291 — Calocorts lineolatus.

Pale greenish-ochraceous, pronotum with its posterior disk frequently infuscated and often with two black spots; scutellum with two central black lines; extreme lateral margins of the corium, and usually a discal fascia to corium, dark brown; legs speckled with black; cuneus stramineous, membrane pale fullginous, with the veins piceous; antennæ robust, second, third and fourth joints about equally thick; pronotum much narrowed anteriorly, tible somewhat longly setose.

Length 81 to 9 millim.

Hab. Kashmir; Sind Valley (Stoliczka).—Widely distributed in the Palæarctic Region and recorded from Turkistan. 452 CAPSIDÆ.

1412. Calocoris dohertyi sp n

Pale ochraceous, apex of second joint of antennæ, eyes basal margin of head, and a small spot near each posterior augle of pronotum black; membrane very pale fuliginous; first joint of antennæ subequal in length to pronotum, second almost twice as long as first; head moderately tumid between eyes, pronotum with some very obscure transverse striations; corium very finely and obscurely pilose; the membrane in some positions exhibits pearly greenish lustre tibuæ rather longly setose.

Length 7 millim.

Hab Tenasserim; Myitta (Doherty).

1413. Calocoris stoliczkanus, Dist Tr. Ent Soc 1879, p 124; id Sec Yark Miss, Rhynch p 10, f 7 (1879)

Ochraceous clouded with brown, and sparingly palely flavescentive pilose; antennæ brownish, second, third, and fourth joints with their apices piceous, first joint robust, shorter than pronotum, second somewhat suddenly thickened towards apex, third and fourth very slender, fourth not much more than half the length of third, cuneus somewhat paler in colour than corium, brownish and pilose at base and with a small piceous spot at apex; membrane pale fuscous clouded with brown, body beneath pale obscure ochraceous, finely palely pilose and with a somewhat obscure stigmatal series of small brown spots; legs mutilated in specimens described; pronotum faintly angulose; scutellum somewhat distinctly strigose.

Length 8 millim.

Hab. Punjáb; Murree (Stoliczka)

1414. Calocoris angustatus, Leth Ind Mus. Notes, 111, no 2, p 90 (1893) fig.

Very elongate; dull flavescent; antennæ fulvous, first jomt 1 obust, as long as the head, second joint very long, slender, four times as long as first, third, fourth and fifth joints equal, slender, equal in length to the first joint; pronotum trapeziform, punctulate, posterior angles somewhat prominent, slightly obtusely acute, anterior angles obtuse, anteriorly with a distinct collar, the apical area for about one-third from anterior margin robustly callose; hemelytra flavescent, punctate, sparingly fulvous-pubescent, claims and sutural portion of commit roseate, sometimes concolorous; legs concolorous, tibiæ armed externally with ten or eleven black spinules, apices of tarsi fuscous. (Lethierry.)

Length 6 to 7 millim.

Hab. Madras.

Stated to injure cholum (Sorghum vulgare) in the South Arcot District of the Madras Presidency mevius 453

Division ---- 9

Genus MEVIUS, nov

Type, M lewisi, Dist Distribution. Ceylon.

Somewhat broadly ovate, narrowed anteriorly and posteriorly; head somewhat long, narrowed anteriorly, not quite so long as width between eyes, which touch the anterior margin of the pronotum; antennæ with first joint moderately incrassate towards apex, shorter than head, second joint rather stout, about three times as long as first, third about as long as first; rostrum apparently reaching the posterior coxe (type a carded specimen); pronotum tumid at base, deflected anteriorly, the lateral areas obliquely deflected, posterior margin in front of scutellum strongly concavely sinuate, and there slightly narrower than anterior margin, between posterior angles about twice as wide as anterior margin where there is a narrow anterior collar, scutellum small, tumid, basal margin strongly convex; clavus broader posteriorly than anteriorly, corium outwardly rounded, its marginal area moderately laminate; cuneus almost as broad as long, cuneal fracture indistinct; membrane with a single oblong cell, legs of moderate length, femora incrassate, tarsi with the last joint much the longest

I cannot locate this genus in any division with which I am acquainted It appertains to the *Phytocoraria* and *Capsaria* I place it between the two divisions, and refrain from making a

new one on a single genus.

1415 Mevius lewisi, sp n

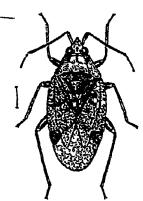


Fig 202 -Mevius lewisi

Length 5 millim Hab. Ceylon (Lewis)

Head and pronotum ochraceous, fuscously punctate, base of pronotum (its surface injured in type) and scutellum piceous speckled with ochraceous, the apex of the scutellum strammeous; corium piceous-brown speckled with flayous; cuneus dark castaneous, finely speckled with flavous, its apex and a spot at inner angle flavescent, membrane fuliginous, thickly covered with minute paler spots; antennæ and legs castaneous, base of first and the two apical joints of antennæ, apices of tibiæ, a central annulation to posterior tibie, mottlings to intermediate tibiæ, and the tarsi pale ochraceous.

Division UAPSARIA.

Capsaria, Reut Bih Vet -Ah Handl in, 1, p. 6 (1875)

Reuter has subsequently amalgamated his previous division *Phytocaria* with the *Capsaria*, but I think unnecessarily. The *Capsaria* may always be distinguished by the more profound cuneal fracture as well as by more apparent though superficial characters

This may be taken as the largest and most typical division of the Capsidæ, and its representatives are universally distributed.

Synopsis of Genera.

A Corrum not or indistinctly punctate	
a Pronotum not or very indistinctly	
punctate	
a Eyes large, pronotum about half as	
long as broad, first joint of antennæ	
about as long as head	LYGUS, p 454
b. Eyes small; pronotum more than half	•
as long as broad, first joint of	
antennæ longer than head	LUCITANUS, p. 465
b Pronotum coarsely punctate	HERMOTINUS, p 462.
B Corium longly pilose	, 2
a Antennæ slender; body elongately oval.	Pœchoscyrus, p 458
b Antennæ with apex of second joint	,,,
incressate and pilose, body broadly	
ovate	GISMUNDA, p. 463
C. Corium more or less strongly punctate	C.202202.22, pr 200
a Pronotum remotely and obsoletely	
punctate	Liocoris, p 463
b Pronotum strongly punctate	moodais, p acc
a Antennæ slender	
a'. Head narrow, longer than broad at base	Currentonnomics n 460
b'. Head very broad, as broad as	Camptobrochis, p. 460
o. Head very broad, as broad as	Posterness n 460
long	Bothriomiris, p 469.
b Antennæ with apex of second joint	
moderately incrassate, head some-	D 105
what narrow	DEREOCORIS, p. 465
c Antennæ with second joint incrassate	O 109
from near middle; head broad	Capsus, p. 468

Genus LYGUS

Lygus, Hahn, Wanz Ins 1 p 147 (1831); Fieb. Eur. Hem. pp. 68, 272 (1861), Reut Acta Soc Fauna & Flora Fenn i, p 61 (1875). Lygocoris, Reut Bih Vet-Ahad. Handl. 111, 1, p 16 (1875) Orthops, Fieb. Wien ent. Monateb 11, p 311 (1858)

Type, L. pabulinus, Linn., a Palæarctic and Nearctic species.

Distribution Probably universal

Oblong, ovate, slightly pubescent; head with the vertex moderately elevated, eyes moderately exserted and placed close to

LYGUS. 455

anterior margin of pronotum, antenna with the second joint very

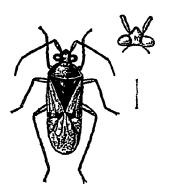


Fig 293 -Lygus sor didus.

slightly incrassate towards apex; pronotum auteriorly strongly convexly deflected, anterior disk with transverse elevated glabrous calli, basal margin convexly rounded, hemelytra longer than abdomen, cuneus broad at base, posterior tarsi with the second joint a little longer than the first.

A. Pronotum unicolorous.

1416. Lygus sordidus, sp n.

Dull yellowish-white; scutellum, clavus, and a spot on apex of corum and base of cuneus fuscous-brown;

base of first joint and apical area of second joint of antennæ piceous; apical area of intermediate femora slightly, and apical area of posterior femora strongly suffused with reddish-castaneous; first joint of antennæ about as long as head, second about three times as long as first; pronotum obscurely punctate: hemelytra finely pubescent

Length $5\frac{1}{2}$ millim.

Hab. Utakamand (Atkinson, Brit. Mus.). Ceylon (Green).

1417. Lygus albescens, sp. n.

Uniform dull creamy-white, third joint of antennæ infuscated (remainder mutilated in specimen described): pronotum somewhat distinctly punctate, first joint of antennæ scarcely longer than head, second rather more than twice the length of first; pronotum with an anterior transverse impression a short distance from frontal margin, defining a tumid area with a central glabrous callosity; above finely pubescent

Length 6 millim

Hab. Utakamand (Atkinson Coll , Brit. Mis.).

1418. Lygus decoloratus, sp. n.

Very pale ochracious, pronotum, scutellum, and lateral margins of corium paler with a slightly greenish tinge; membrane pale fuliginous mottled with some scattered fuscous markings; first joint of antennæ about as long as head, second about twice as long as first, hemelytra finely pubescent

Length 5 millim.

Hab. Ceylon; Pundaluoya (Green).

The following note has been received from Mr. E. E. Green:—
"This species has recently appeared as a pest of the tea-plant n Bogawantalawa (6000 ft). It punctures the young shoots and

456 CAPSIDÆ.

causes them to wither. It also attacks Verbena and Tropæolum plants in the bungalow gardens My correspondent reports that a bed of Tropæolum was completely ruined by the insects I have found the egg embedded in the young stems of Verbena plants and in succulent shoots of tea The egg is cylindrical, rounded at posterior extremity; it is embedded in a slightly diagonal position, the truncate extremity being flush with the surface of the plant. Length 0.90 millim "

1419. Lygus viridenus, Motsch (Deræocoris) Bull Soc. Nat. Mosc. xxxvi (2) p 83 (1863)

Pale greenish, head, antennæ, rostrum, body beneath and legs pale ochraceous; apex of second joint and the third and fourth joints of antennæ, eyes, and apices of tarsi black; membrane pale greenish-brown; tibiæ and tarsi less ochraceous and more virescent than the femora; pronotum finely punctate.

Var. All the ochraceous markings replaced by a much more greenish tinge, giving the insect a somewhat unicolorous appearance.

Length 5 millim.

Hab. Ceylon (Lewis & Green)

I have received both the typical and varietal forms from Ceylon.

1420. Lygus pubens, sp n

Ochraceous; lateral marginal areas of the corium much paler in hue; clavus suffused with castaneous, two curved fuscous lines, united posteriorly, on posterior disk of corium; membrane very pale fuliginous, infuscated on apical area; antennæ piceous, second joint, excluding apex, ochraceous, pronotum very finely punctate.

Var a. Scutellum, a broad transverse fascia at apex of corium, clavus, and a small spot at apex of cuneus piceous or black, first

joint of antennæ ochraceous.

Length $3\frac{1}{2}$ to 4 millim.

Hab. Ceylon; Pundaluoya (Green).

B. Pronotum with two obscure dark spots

1421. Lygus immitis, sp. n

Greenish-ochraceous, thickly finely pilose, eyes and a small spot at apex of cuneus black; pronotum with the disk more palely virescent, with two very obscure central linear pale fuscous spots near base; scutellum with two central pale fuscous linear lines, diverging posteriorly, clavus and corium irregularly mottled with pale fuscous, membrane fuliginous, with pale virescent suffusions; posterior femora with pale brownish apical annulations; apex of rostrum and apices of tarsus piceous

Length $4\frac{1}{2}$ to 5 millim.

Hab. Ceylon (Lewis); Pundaluoya (Green).

LYGUS 457

C Pronotum with two prominent black spots.

1422 Lygus catullus, sp n

Head and pronotum pale ochraceous; eyes, extreme apex of head, and two spots on anterior area of pronotum black; scutellum and corium dark shining fuscous; two small basal spots and apex to scutellum, and basal and apical marginal spots to corium pale ochraceous; cuneus pale ochraceous with an inner fuscous spot, membrane very pale fuliginous, base irrorated with pale flavescent and fuscous, body beneath and legs pale ochraceous, a lateral spot to meso- and metasterna, and some transverse fasciæ and the apex to abdomen dark fuscous; pronotum very obsoletely finely punctate; scutellum (excluding apex) finely transversely striate; corium with some scattered pale flavescent hairs, antennæ pale ochraceous, extreme apex of first, apical half of second, and the third joint (excluding base) fuscous.

Length 4 millim

Hab. Tenasserim, Myitta (Doherty).

D. Pronotum with a central dark longitudinal fascia.

1423. Lygus biseratensis, Dist. Fasciculi Malayenses, Zool vol i, p 269, pl xvi, ff 11, 11 a (1903)

Pale obscure ochraceous, finely sericeous, apices of first, second, and fourth joints of antennæ, eyes, a submarginal anterior line and a central longitudinal fascia to pronotum black; cuneus fuscous-brown; first and fourth, and second and third joints of antennæ subequal in length.

Var. a. Scutellum and corrum pale purplish-brown, the lateral

margins of the last pale ochraceous.

Var b Scutellum and corrum dark castaneous, the lateral margins of the last narrowly pale ochraceous; femora moderately infuscated.

Length 7 millim.

Hab. Coylon; Kandy (Green) Burma, Mandalay (Fea) — Siamese Malay States.

E Species unknown to the writer.

1424. Lygus bengalicus, Reut Ent Tidshr v, p. 195 (1884)

Green, somewhat palely pubescent; head, antennæ, apices of femora, tibiæ, and tarsi more or less reddish-brown, apex of clypeus piceous; antennæ with about a third of basal joint and apex of second somewhat fuscous, frequently in the & with the second joint totally fuscous; pronotum piceous, with a large anterior rounded greenish-livid spot in &, or sordidly greenish, with two submarginal broad stripes, sometimes broadly dilated posteriorly and before the basal margin confluent in Q; hemelytra

with a fuscous spot at the interior apical angle of corium; membrane fuliginous, the cells immaculate or with their apices palely infuscated; a hyaline groove at apex of cuneus in σ , or two semihyaline spots before the middle of the external margin in the \mathcal{Q} , apices of tarsi darkly fuscous, rostrum reaching posterior cox ω ; hemelytra densely punctate.

Length $3\frac{1}{2}$ to 4 millim. Hab. Bengal (fide Reuter) I have not seen this species.

1425 Lygus obtusus, Reut. Ent Tidekr. v, p 196 (1884).

Dark green, somewhat glabrous, slightly punctate; eyes fuscous; clypeus, a band on the pleura of the prothorax, an apical stricture and medial basal margin of pronotum, a medial band to scutellum, all the claval sutures (interiorly broad), an apical spot to corium, apical margin to cuneus (interrupted medially), a-common arcuated fascia to the apices of the cells and two spots on the external edge of membrane, another a little behind apex of cuneus and another situate behind middle fuscous, legs dark green, unspotted, tibiæ darkly spinulose, last joint of tarsus apically dark fuscous, rostrum reaching the intermediate coxæ, hemelytra slightly punctate.

Length, Q, $3\frac{3}{2}$ millim. Hab. Bengal (fide Reuter). I have not seen this species.

Genus PŒCILOSCYTUS.

Posciloscytus, Fieb Wien ent Monatsb 11, p 311 (1859), id. Eur Hem. pp 68, 276 (1861), Reut Bih Vet.-Al Handl 111, 1, p 19 (1885), id Acta Soc Faun. & Flora Fenn i, p. 80 (1875) Subg Charagochilus, Fieb Wien ent Monatsb 111, p. 309 (1859) " Systratiotus, Dougl. & Scott, Brit. Hem p. 443 (1865)

Type, P. unifasciatus, Fabr., a Palæarctic and Nearctic species. Distribution. Probably universally distributed.

Body oval, opaque or subopaque, above flavescently pilose; head nearly vertical, inner margins of eyes marked with testaceous pubescence, eyes moderately exserted; antennæ moderately slender, first joint not longer than head, second twice as long as first, rostrum reaching or only slightly passing intermediate coxæ; pronotum trapeziform, anteriorly convexly deflected, posterior margin truncate, not covering basal margin of scutellum, the disk densely punctate; cuneus very strongly fractured, its apex ferruginous or flavous.

1426. Pæciloscytus longicornis, Reut. (Charagochilus) Ent. Tidskr. v, p. 196 (1884).

Black, hemelytra and anterior collar to pronotum greyishly

pilose; a flavescent spot on apical margin of corium in front of



Fig 294
Paciloscytus longicornis

cuneus, and the apex of cuneus also flavescent, antennæ long, first joint black, second about as long as posterior margin of pronotum, testaceous, with its apex black, third and fourth black, base of third flavescent; pronotum and scutellum rugulose; tibiæ pale ochraceous, their bases and apices and a central annulation to posterior pair black; membrane fuliginous, the basal cells a little darker with their margins flavescent.

Length 33 to 5 millim

Hab. Calcutta (Brit. Mus). Ceylon (Gieen) Nicobar Islands; Teressa (fide Reutei)—Tonkin.

1427 Peccloscytus consanguineus, sp n.

Allied to P. longicornis, Reut., but differing in being less greyishly pilose above, basal margin of pronotum, apex of scutellum, a small spot at apex of clavus, and basal angle of corium (somewhat broadly) ochraceous, femora pale ochraceous, their apical halves broadly annulated with castaneous; pronotum a little more convex and more deflected anteriorly; scutellum more tumid and distinctly transversely striate

Length 32 millim.

Hab. Burma; Bhamo. Tenasserim; Myıtta (Dokerty).

1428. Pæciloscytus pygmæus, sp n

Black, hemelytra greyishly pilose; posterior margin of pronotum in front of base of corium, a small spot near base of lateral margin to corium, its inner margin beyond clavus (narrowly), and its apical margin before cuneus (broadly) ochraceous, apex of cuneus pale hyaline; membrane fuliginous, its basal cells piceous and margined with flavescent, antennæ piceous, basal half of second joint ochraceous, rostrum greyish-white, medially annulated with piceous, and reaching the posterior coxæ; legs piceous, femora broadly annulated near base with greyish-white, the apical halves of tibiæ, and tarsi excluding apices, greyish-white or very pale stramineous, apices of femora imperfectly annulated with brownish-ochraceous, pronotum, scutellum, and clavus very distinctly punctate

Length 2\frac{2}{5} to 3 millim.

Hab. Ceylon; Peradeniya (Green)

1429. Peciloscytus capitatus, sp n

2. Piceous, greyishly pilose; head, antennæ, rostrum, posterior margin of pronotum, posterior lateral margin (narrowly) and

interior apical margin of corium, basal and lateral margins and apex of cuneus ochraceous; coxe and legs pale flavescent, posterior femora annulated with castaneous on apical areas, spinules to tibie piceous, third and fourth joints of antenne, excluding extreme bases, fuscous; membrane fuliginous, margins of the basal cells flavescent; abdomen beneath with the disk piceous, and less longly greyishly pilose than the lateral areas, on which there is a submarginal series of small black spots, rostium passing the posterior coxe

Length, $2, 5\frac{1}{2}$ millim.

Hab Ceylon, Hambantota (Green).

Genus CAMPTOBROCHIS

Camptobrochis, Fieb Wien ent Monatsb ii, p. 304 (1859); id Eur Hem p 248 (1861), Reut Bih Vet -Ah Handl iii, 1, p 20 (1875), id Acta Suc Faun & Flora Fenn 1, p 84 (1875) Camptobrochys, Fieb Eur Hem p 64 (1861)

Type, C punctulatus, Fall., a Palæarctic species
Distribution Nearctic, Pelæarctic, and Oriental Regions

Body oval, convex, shining, strongly punctate; head short, vertical; eyes large, exserted, touching anterior margin of pronotum; rostrum reaching or just passing the intermediate coxæ; antennæ with the basal joint not quite so long as head, second about twice as long as first or a little more than twice as long; pronotum convexly anteriorly deflected, strongly punctate, with a distinct transverse anterior callus, basal margin about twice as broad as anterior margin, truncate, oblique at lateral areas; corium with cuneus longer than abdomen; cuneal fracture profound, tibiæ spinulose

A Corrum, excluding lateral margins, almost uniformly punctate

1430. Camptobrochis orientalis, sp n

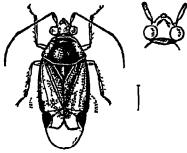


Fig 295 — Camptobrochis orientalis

Head pale ochraceous, its apex and basal margin black, pronotum black, its margins and lateral marginal areas ochraceous, the last brownly punctate, scutellum black, its lateral margins and apex ochraceous; corium and clavus black, the first with the whole discal area ochraceous; membrane very pale fuliginous and subhyaline, cuneus black, its inner angular area ochiaceous, body beneath black, pro-

sternum and legs ochraceous, legs annulated with fuscous,

antennæ piceous, bases of first, third, and fourth joints ochraceous; eyes greyish-white.

Length 5 millim.

Hab. Ceylon; Pundaluoya (Atlanson, Brit Mus).

1431 Camptobrochis lutulentus, sp n

Dark castaneous, shining; lateral margins of corium—widened posteriorly—and the legs pale ochraceous, the last somewhat obscurely annulated or suffused with fuscous; the pale lateral margins of corium traversed medially by a castaneous line; scutellum with an ochraceous spot near each basal angle; cuneus and membrane pale fuliginous, an inner streak and apev to the first, and cellular margins to the second, castaneous or fuscous-brown, eyes piceous; pronotum, clavus, and corium strongly punctate; basal joint and base of second joint of antennæ a little paler in hue; scutellum subglabrous; rostrum reaching the posterior coxæ

Var. Much paler in hue; head, pronotum, and corium ochraceous, not castaneous, the corium with paler suffusions, or apparently exhibiting a subbasal and two discal paler elongate spots

Length 4 millim.

Hab. Ceylon; Pundaluoya and Kandy (Green). Tenasserim; Thagata.

Allied to the Palzarctic species, C. lutescens, Schill. The variety

is from Tenasserim

1432. Camptobrochis uniformis, sp n

Head, antennæ, rostium, pronotum and sternum pale ochraceous, the pronotum thickly, somewhat coarsely brownly punctate; eyes and apex of second joint of antennæ piceous, third and fourth antennal joints fuscous, base of third joint pale flavescent; scutellum pale castaneous, glabrous; corium brownish-ochraceous, thickly punctate, very finely pilose, the lateral margins pale ochraceous; cuneus pale fuscous, with an inner fuscous spot; membrane pale fuliginous; the veins darker, and the lateral and apical margins paler. Body and legs imperfectly seen owing to the typical specimen being in a carded condition.

Length 5 millim Hab. Burma; Katha.

B Disk of corrum impunctate.

1433 Camptobrochis similis, sp n

Pale ochraceous; eyes and apex of second joint of antennæ black, third and fourth antennal joints and apices of the tarsi fuscous, femora more or less mottled with darker ochraceous;

head glabrous; pronotum coarsely punctate, the anterior transverse callosity glabrous; scutellum glabrous; clavus thickly and coarsely punctate, corium with subclaval and sublateral punctures, the corium with a more or less distinct fuscous longitudinal streak; abdomen beneath with a central sublateral fuscous fascia; rostrum just passing the intermediate coxe.

Var. Basal joint and base of second joint of antennæ fuscous.

Length 4 millim.

Hab Ceylon (Lewis), Peradeniya (Green). Tenasserim; Myitta (Doherty).

Genus HERMOTINUS, nov.

Type, H signatus, Dist. Distribution. Tenasserim.

Somewhat broadly ovate, pronotum strongly punctate; corium impunctate, moderately pilose, head somewhat broad, anteriorly deflected; eyes very large and transverse, touching but projecting beyond the anterior margin of the pronotum, antennæ slender, first joint longer than head, second nearly three times the length of first; rostrum reaching the intermediate coxæ; pronotum with a narrow anterior collar, behind which are two transverse callosities, posterior margin more than twice the width of anterior margin, its lateral margins sinuate, the disk tumid, scutellum subtriangular, a little transversely foveate at base, hemelytra with the lateral margins somewhat ampliated, the cuneus a little longer than broad, the fracture distinct but not profound; legs of moderate length, the femora moderately incrassate, the tibiæ setose.

1434. Hermotinus signatus, sp n

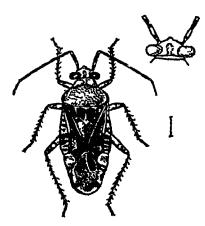


Fig 296 -Hermotinus signatus

Head, pronotum, and scutellum very pale ochraceous, eyes a central basal fascia to head and the punctures to the pronotum brown; antennæ brown, annulated with stramineous, scutellum with two large discal oblong black spots; corium dark fuscous-brown, some blackish spots and suffusions on clavus; the lateral areas and cuneus pale semi-hyaline, with transverse fuscous fasciate spots, cuneus with the apex and transverse discal spot pale fuscous, mempale fuliginous, very piceous at base, the margins paler, legs pale ochraceous,

annulated with fuscous, pronotum coarsely punctate, its

lateral margins ongly pilose, cornum longly pilose at claval margin.

Length 42 millim.

Hab Tenasserim; Mystta (Doherty)

Genus GISMUNDA, nov.

Type, G. cheloma, Dist Distribution Sikhim

Body broadly ovate, head strongly deflected in front of eyes, which about touch the anterior margin of the pronotum; antennæ with the first joint a little thickened, about as long as head, second about twice as long as first, its apical area distinctly increasate and pilose, third and fourth joints together almost as long as second; iostrum about reaching the intermediate coxæ; pronotum short, transverse, very strongly deflected, coarsely punctate, lateral margins oblique, basal margin truncate, the lateral angles subprominent; scutellum triangular, moderately tumid, transversely striate; hemelytra flavescently pilose, their lateral margins convex, corium with cuneus shorter than abdomen, membrane passing abdominal apex, legs of moderate length, tibiæ setose.

1435 Gismunda chelonia, sp n

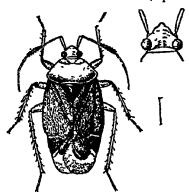


Fig 297 — Gesmunda chelonia

Head and pronotum ochraceous, eyes and basal margin of pronotum, interrupted at centre, piceous, scutellum black, corium castaneous, flavescently pilose: cuneus very dark castaneous, its anterior margin and apex flavescent; membrane fuliginous, margins of cell broadly ochraceous: antennæ ochraceous, apex of second joint broadly black; body beneath black; prosternum and legs ochraceous.

Length 41 to 51 millim

Hab. Sikhim; Mungphu (Atkinson Coll., Brit. Mus.).

Genus LIOCORIS.

Liocoris, Fieb Wien ent Monatsb 11, p 309 (1858), id Eur Hem pp 67, 270 (1861); Reut Bih Vet-Alad Handl iii, 1, p 20 (1875); id Act Soc. Sc Fenn xx111, no 2, p 45 (1898)

Type, L tripustulatus, Fabr, a Palæarctic species. Distribution. Palæarctic and Oriental Regions.

Body oval, convex above, glabrous, shining, pronotum remotely and obsoletely punctate; beneath very slightly pubescent; head

464 CAPSIDÆ.

about as long as broad; eyes somewhat strongly exserted, almost touching anterior margin of pronotum; rostrum reaching the posterior coxæ; antennæ with the second joint shorter than the basal margin of the pronotum, third and fourth joints together longer than the second; pronotum with the posterior about twice as broad as anterior margin, corium more or less punctate.

1436. Liocoris myittæ, sp n.

Ochraceous; spical half of second joint and the third and

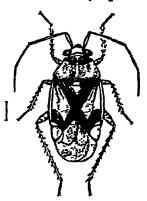


Fig 298 -Liocoris myittæ

fourth joints of antenne, two large rounded spots at anterior margin and two (obscure) at posterior margin of pronotum, two rounded spots at base of scutellum, clavus, a large angulated transverse spot at apex of corium, and a large spot at inner basal angle of cuneus black, membrane pale fuliginous mottled with ochraceous; femora reddish-ochraceous; tibiæ and tarsi pale fuscous; apices of femora obscurely annulated with fuscous; apices of tibiæ black; abdomen beneath with a sublateral series of small fuscous spots.

Length 4 millim.

Hab. Tenasserim; Myıtta (Doherty)

1437. Liocoris formosus, sp n

Black; head (excluding eyes) and pronotum (excluding basal margin) ochraceous; a large apical spot to scutellum, an elongate spot at base, and a transverse spot at apex of corium, and apex of cuneus flavescent; membrane fuliginous mottled with pale fuscous; antennæ piceous, basal third of second joint, basal half of third joint, and extreme base of fourth joint ochraceous, body beneath and legs black; head beneath and lateral areas of prosternum reddish-castaneous; rostrum, anterior coxæ, anterior femora (excluding apices), a broad central annulation to anterior tabæ, and numerous annulations to intermediate and posterior tibiæ flavescent; above shining, corium very obscurely and sparingly punctate.

Length 3½ millim.

Hab. Tenasserim; Myitta (Doherty)

1438 Liocoris partitus, Walk (Capsus) Cat Het vi, p 119 (1873)

Very pale luteous; antennæ (excluding basal joint), eyes, clavus, extreme basal margin of scutellum, lateral and apical margins of corium, the first strongly widened towards apex, apex of cuneus, central lobe to deflected head, and disk of mesosternum black; disk of abdomen beneath, and a submarginal serie of small spots,

piceous; membrane fuliginous, with two paler spots on the lateral margins; head and anterior margin of pronotum darker luteous: rostrum reaching the posterior coxe, its apex black.

Length 6 millim.

Hab. " North Hindostan" (Boyes, Brit. Mus.),

Genus LUCITANUS, nov.

Type, L. punctatus, Kirby.

Distribution. Ceylon

Subovate, head somewhat long, moderately deflected before eyes, first joint of antennæ considerably longer than head and a little thickened, second joint much longer than first and thickened on apical area, third and fourth joints short, slender, third a little longer than fourth; rostrum about reaching the posterior coxæ; pronotum tumid, deflected and narrowed anteriorly, lateral margins a little rounded, basal margin slightly concave in front of scutellium and thence oblique to lateral angles; scutellium large, subtriangular, about as broad as long; clavus very long, extending almost to base of membrane; lateral margins of corium a little convex, cuneus much broader than long; legs of moderate length, posterior femora thickened; tibiæ setose.

1439 Lucitanus punctatus, Kirby (Leptomerocoris), J Linn Soc, Zool xxiv, p 108 (1891)

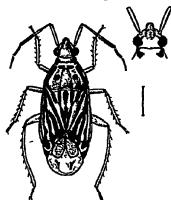


Fig 209 — Lucitanus punctatus

Pale ochraceous; head and pronotum shining; eyes, lateral margins (broken anteriorly), two anterior contiguous transverse discal spots and two rounded widely-separated central spots to pronotum, and longitudinal fascie to scutellum and corium, black: membrane very pale fuliginous, subhyaline, the venation and two posterior discal angulate lines black; antenne with the apex of the second joint fuscous, third and fourth joints black, base of third stramineous.

Length 5 to 61 millim.

Hab. Ceylon, Tangalla (Green)

Genus DERÆOCORIS.

Dereocoris, Kirschb Jahr. V. Nat. Herz Nassau, Heft x, p 208 (1855); Stål, Hem Afr iii, p 20 (1865), Reut Act. Soc Sc Fenn. xxni, no 2, p 18 (1898), et syn Macrocapsus, Reut Öfv Finsl. Soc Förl xxi, p 55 (1879)

Chilociates, Horv. Termész. Fuzetek, xii, p. 39 (1889). Shana, Kiik Entomologist, 1902, p. 315

Type, D. olivaceus, Fabr, a Palæarctic species

Distribution Probably almost universally distributed.

Body oval, above shining, rarely pilose, excepting head moderately punctate; head with somewhat faint indications of a longitudinal impression which does not extend through the basal area, eyes touching anterior margin of pronotum, antennæ finely pilose, the last two joints together shorter than the second, apex of second joint moderately incrassate, first joint about as long as head, rostrum reaching the intermediate or posterior coxæ; pronotum with a narrow anterior collar, the basal nearly three times broader than the anterior margin, posteriorly strongly convex; scutellum moderately tunid; legs of ordinary length, posterior femora moderately incrassated, tibiæ setose

The identity of Shana, Kirk, with Chilocrates, Horv, is evident, from the description of each; I have seen the type of Chilocrates,

and prefer to treat it as a section of Derceocoris.

1440. Deræccoris patulus, Walk. (Capsus) Cat Het vi, p 120 (1873). Chilocrates lenzii, Hoi v Tei misz Fuzetek, xii, p. 39 (1889) Shana rayana, Kii k Entomologist, 1902, p 316.

Black, shining, finely punctate, head, antennæ, rostrum, anterior area of pronotum, prosternum and legs ochraceous; apex of second joint of antennæ broadly black; bases of posterior

temora black, rostrum reaching the posterior coxe, extreme apex of head sometimes black.

Var. a. Pronotum, excluding narrow basal area, ochraceous

Var. b. Pronotum with an anterior black spot behind each eye, and with the basal black margin almost obliterated.

Var c Pronotum black, its collar and a central anterior linear spot ochraceous; femora black, tibiæ and taisi ochraceous, bases and apices of tibiæ and apices of tarsi black.

Vai d lenzie, Hory, supra Resembling var. c. but disk of head black.

sembling var. c, but disk of head black, legs black, a subapical annulation to anterior tibis, and first and second joints of the anterior tarsi, flavescent, posterior legs mutilated in type.

Length 4 to 5 millim.

Hab. Kashmir (Budapest Mus) "North Hindostan" (Boyes, Bist Mus) Sikhim, Kurseong (Calc Mus.), Mungphu (Atkinson, Brit. Mus.). Burma, Karennee (Fea)

Dr Horvath has kindly forwarded to me the type of his Chilo-

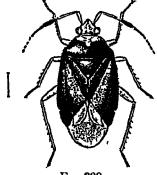


Fig 300 Deræocoris patulus

crates length for comparison. I have not seen the Shana ravana, Kirk., but from the description of both genus and species there can be little doubt as to its identity.

1441. Deræocoris variabilis, sp n

Uniform pale ochraceous; apical area of second joint of antennæ black; membrane pale fuliginous mottled with greyish; cuneus more or less piceous.

Above very finely punctate, rostrum reaching the posterior

COZ®,

Var. a. Scutellum black; sometimes with a piceous spot near apex of corium.

Var. b. Resembling var. a, but with four black spots to pro-

notum—two on each side

Var. c. Resembling var. b, but with a large irregular fasciate-

like black spot on disk of corium

Var d Resembling var. c, but pronotum without the four black spots, its basal margin being more or less broadly black.

Length 4½ to 5 millim.

Hab Sikhim, Mungphu (Atlanson, Brit, Mus), Kurseong

(Calc. Mus.) Shillong (Brit. Mus.)

The five forms, as detailed above, are representative of the species, more or less intermediate links have also passed through my hands

1442. Deræocoris rufus, sp n

Shining, reddish-ochraceous, head, second joint of antennæ and apices of tarsi black; third joint of antennæ stramineous, its apex piceous, membrane pale fuliginous; above, excluding head, finely punctate, rostrum imperfectly seen, owing to specimen described being in a carded condition.

Length 5½ millim

Hab. Sikhim; Mungphu (Atkinson, Brit. Mus.).

1443 Deræocoris ornandus, sp. n.

Brilliant, shining; pronotum, scutellum, cuneus, body beneath and posterior legs black, corium and lateral areas of abdomen beneath sanguineous, head, antennæ, a broad subbasal and a narrow subapical annulation to posterior femora, and posterior tibie (excluding base) ochraceous, anterior and intermediate legs mutilated in specimen described; apical area of head and apical half of second joint of antennæ black, membrane fuliginous with greyish mottlings, above finely punctate, rostram mutilated in specimen described

Length 5 millim

Hab. Sikhim, Mungphu (Atkinson, Brit. Mus).

Genus CAPSUS.

Capsus, Fabr. Syst Rhyng p 241 (1803), Reut. Act. Soc Sc Fenn. xxiii, no 2, p 13 (1897), et syn
Rhopalotomus, Fred Wien ent Monatsb. Bd 11, p 307 (1858).

Type, C. ater, Linn, from the Palmarctic and Nearctic Regions.

Distribution. Nearctic, Palæarctic, and Oriental Regions.

Oblong-ovate, robust, above rugosely punctate; scutellum rugose; head broad, with eyes broader than basal half of pronotum; rostrum incrassate, first joint strongly dilated; antenne inserted near the internal apex of eyes, the last two joints together shorter than second joint, which is gradually apically incrassate legs of moderate length, tibus setose.

1444 Capsus crœsus, sp. n

Pale sanguineous or reddish-ochraceous, second joint of an-

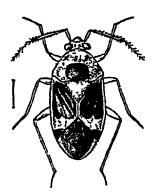


Fig 301.—Capsus crasus

tennæ (excluding base), eyes, a large somewhat rounded posterior discal spot to pronotum, corium (excluding basal angle, lateral margin and apical area), cuneus, and membrane black; the palely fuscous, pronotum coarsely punctate and laterally pilose, with an anterior levigate callosity, scutellum moderately tumid, punctured on basal area; corium finely punctate, its apical area somewhat longly pilose, its lateral margins a little reflexed, second joint of antennæ strongly pilose.

Leugth 5½ to 6 millim Hab. Burma, Palon (Fea).

1445. Capsus remus, sp n

Black or very dark chocolate-brown; extreme base of first joint of antennæ, an elongate apical spot to scutellum, an elongate discal spot near apex of corium, and the legs sanguineous; tibias sometimes palely fuscous or even black; pronotum coarsely punctate, with an anterior transverse callosity which is centrally sulcate; scutellum tumid, transversely foveate at base, obscurely wrinkled, corium more finely punctate than pronotum, membrane bronzy-brown; second joint of antennæ strongly pilose.

Length 5 to 51 millim.

Hab. Burma; Karennee (Fea).

1446. Capsus pegasus, sp. n

Black; basal joint of antennæ, a small discal spot near apex of corium, basal joint of rostrum, coxæ, legs, and disk of abdomen beneath ochraceous; rostrum (excluding basal joint) piceous, tibiæpalely fuscous; pronotum coarsely punctate, with an anterior callosity which is somewhat centrally sulcate; scutellum tumid, transversely foveate at base, obscurely transversely wrinkled, corium coarsely punctate, membrane fuliginous; second joint of antennæ strongly pilose.

Length 5 millim. Hab. Ceylon (Lewis).

1447. Capsus darsius, sp n

Black; basal joint of autenue, head beneath, legs, and some transverse fasciæ to abdomen beneath testaceous; second joint of antennæ longly pilose; pronotum strongly punctate, with an obscure anterior callosity which is strongly centrally sulcate; scutellum tunid, transversely foveate at base, punctate and obscurely transversely wrinkled; corium thickly punctate, membrans tuliginous.

Length 44 millim

Hab. Burma; Karennee (Coll. Dist).

Genus BOTHRIOMIRIS

Bothmomins, Kul Ti Ent Soc. 1902, p 270

Type, B simulans, Walk

Distribution Oriental Region.

Oblong, broad, remotely pilose; posterior area of pronotum, scutellum, corium, and sternum thickly strongly punctate; head broad, strongly deflected anteriorly, short as seen above, eyes large, touching the anterior margin of the pronotum but projecting beyond it, antenne long, second joint longer than pronotum; pronotum without an anterior collar, not distinctly transversely impressed, the anterior area tumid, centrally sulcate, its posterior lateral margins oblique, the posterior area thickly strongly punctate, centrally carinate, the base truncate, oblique towards lateral angles, scutellum somewhat large and subtriangular; cuneus about as broad as long; interior cell of membrane posteriorly angulate, rostrum about reaching the posterior coxe, femora short, moderately incrassate

Kukaldy states that this genus will probably form a new

division I place it here, provisionally, in the Capsaria.

1448 Bothriomiris simulans, Walk. (Capsus) Cat. Het. vi, p. 125 (1873)
Bothriomiris maimoratus, Kirk. Ti. E. S. 1902, p. 271

Dark fuscous-brown, finely, sparingly, palely pilose; a longi-

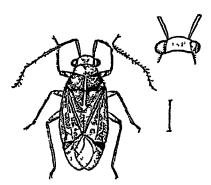


Fig 302 -Both concres simulans

tudinal fascia on inner side of each eye, anterior area of pronotum (more or less marked with fuscous), a central longitudinal fascia to posterior area of pronotum and scutellum, some waved leticulate marks at apex of corium, basal markings to membrane, basal annulations to femora and apical annulations to tibiæ stramineous, legs reddish-brown; posterior area of pronotum and the corium coarsely punctate; the scutellum finely transversely striate.

Length 6 to 7 millim.

Hab. Burma; Karennee (Fea).—Malay Peninsula; Perak,
Singapore.

1449 Bothriomiris testaceus, sp. n

Dark testaceous, a central fascia on apical half of scutellum and an elongate discal spot near apical margin of corium pale testaceous; membrane dark fuscous, the veins a little paler, head anteriorly and lateral margins of pronotum longly pilose; pronotum and corium coarsely punctate, scutellum transversely striate; legs more or less mutilated in the typical carded specimen described, third and fourth joints of antennæ slender and fuscous, scutellum distinctly transversely foveate at base.

Length 5 millim

Hab. Burma; Karennee

Division TERATODELLARIA

Teratodellaria, Reut Bih Vet -Ak Handl 111, 1, p. 5 (1875)
Fulviaria, Uhler, Chech-list Hem Het N Amer p 19 (1886), Reut.
Ann Soc. Ent Fr 1892, p 391

This division, as I understand and use it here, is primarily distinguished by the longly produced horizontal head.

Reuter, in his synopsis, places it before the Miraiia, but according to the arrangement pursued here, and in agreement with the views of Uhlei, I place it after the Capsaiia.

Reuter has sank his name of the division in favour of that of the subsequent one proposed by Uhler, but I have already (ante, p 413) explained my reasons for not following that course

Genus TYRAQUELLUS, nov.

Type, T. albofasciatus. Motsch.

Distribution. Ceylon.

Elongate, head moderately long and somewhat triangular anteriorly; eyes inserted near anterior margin of pronotum; antennæ with the first joint incrassate and about as long as head, second about three times as long as first; rostrum reaching the posterior coxæ; pronotum nearly twice as broad at base as long, with a very narrow anterior collar, behind which it is distinctly constricted, gradually deflected from base, lateral margins concavely sinuate, mesonotum a little exposed, scutellium small, subtriangular; hemelytra with their margins nearly straight and subparallel; membrane longly passing abdominal apex; cuneus a little longer than broad; legs more or less mutilated in all the specimens examined.

1450. Tyraquellus albofasciatus, Motsch (Leptomeiocoris?) Bull. Soc Nat Mosc. xxxvi (2) p. 86 (1862)

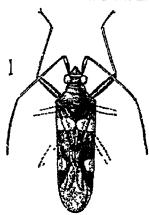


Fig 303
Tyraquellus albofasciatus.

Black or piceous; antennæ ochraceous, first joint black with an apical ochraceousannulation, eyesgranulate, silvery-white, corium and clavus crossed by a transverse macular fascia near apex of scutellum, and corrum with a large apical spot and a smaller one near apex of clavus, white, cuneus sometimes castaneous; membrane fuliginous; colour semiopaque; pronotal posterior angles obtusely subprominent, anterior legs with the coxe and femora piceous, the tibiæ and tarsi ochraceous, remaining legs mutilated in four specimens examined.

Length 3 millim.

Hab Ceylon, Yatıyantota (Green).

1451. Tyraquellus maculatus, sp n

Piceous, corium with a lateral spot outside centre of clavus and a larger spot at apex white, membrane fuliginous; first and second joints of antennæ ochraceous, base of first joint piceous, remainder mutilated, rostrum ochraceous, femora piceous, tibiæ dark castaneous; eyes with silvery-white lustre.

Length 31 millim.

Hab Ceylon, Yatiyantota (Green)

Division BRYOCORARIA

Bryocoraria, Reut Bih Vet-Ah Handl. 111, 1, p 6 (1875); id Ann. Soc Ent Fr 1892, p 393.

Eccritotarsana, Berg (Reut.), Hem Argent Add p 81 (1884) Thausmastomiraria, Kirk J. Bomb. N H Soc. xiv, p. 56 (1902).

In this division the cubital vein to the hemelytra extends from the base to beyond the middle and is profoundly impressed, the last joint of the tarsi is increased; the membrane possesses one long areole or cell.

The Bryoco area include some heterogeneous generic forms, and the two-genera here enumerated appertain to the section divided by Berg as Eccretotarsaria, founded on the Neotropical genus

Eccritotarsus.

Synopsis of Genera

Genus MERTILA.

Mertila, Dist. A. M. N. H. (7) xm, p 113 (1904).

Type, M. malayensis, Dist

Distribution. Burma and Malayana.

Elongately oval, head rather long and depressed in front of insertion of antennæ, of which the first joint is shorter than head and attenuated at base, second joint much longer than first, it and the remaining joints pilose; rostrum not quite reaching the intermediate coxæ; pronotum sometimes as long as broad, with an anterior collar which has its anterior and posterior margins carinate, subimpressed or distinctly constricted before middle, the depression including two transverse callosities, scutellum small, subtriangular, callous, foveate at base; hemely tra much longer than abdomen, membranal cells long, triangular legs moderately short and slender, apical joint of tarsi incrassate.

1452 Mertila malayensis, Diet A. M N H (7) xin, p. 114 (1904).

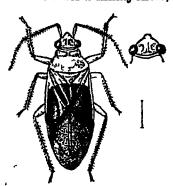


Fig 304.—Mertila malayensis

Orange-red; apex of first and the second joint of antenne, legs, apex of rostrum, corium (excluding basal area), cuneus, membrane, extreme apices of femora, the tibie, tarsi, and sometimes abdomen beneath, indigo-black, head with a distinct central ridge, and a bload foveation on inner side of eyes; pronotum a little hollowed between the anterior callosities, upper surface very finely and obscurely pilose, tibiæ finely setose

Length 5 to 6 millim.

Hab. Burma; Bhamo (Fea).—Singapore (Brit. Mus.).

Genus THAUMASTOMIRIS.

Thaumastomiris, Kirk. J. Bomb. N H Soc. XIV, p 56 (1902)

Type, T. sangunalis, Kirk. Distribution. Ceylon.

Elongately ovate; head vertically depressed in front of eyes (transverse as seen from above), which are large, almost touching, but projecting beyond the anterior margin of the pronotum, broadly transversely sulcate near basal margin; antennæ with first joint longer than head, second a little longer than pronotum, rostrum almost reaching the posterior coxæ; pronotum with a narrow anterior collar, immediately behind which are two transverse callosities, lateral margins a little sinuate, anterior margin moderately concavely sinuate, posterior margin twice the breadth of anterior, scutellum transversely impressed near base and longitudinally sulcate on apical area*; henelytra considerably longer than abdomen, cuneus much longer than broad, curved round to mear apex of membrane, which has a single long cell, legs of moderate length, femora a little thickened, apical joint of tarsi thickened.

1453. Thaumastomiris sanguinalis, Kirl. J. Bomb N H Soc. xiv, p 57, pl. A, f 6, & pl B, f 4 (1902)



Fig 305
Thaumastomers sanguenales

Sanguineous; antennæ and eyes dark fuscous, membrane pale fuscous, with the venation darker, pronotum very finely granulate, corium more finely granulate and very obscurely shortly pilose; tarsi fuscous.

Length 5 millim

Hab. Ceylon; Peradeniya (Green)

Frequents Orinum asiaticum (E E.

Green).

Kirkaldy writes "The types of & ?
have been placed in the British
Museum," but they are not to be found
in that collection

Division CYLLOCORARIA

Cyllocorana, Reut (part,) Bih Vet-Alad Handl m, 1, p 6 (1875); id Act Soc. Sc. Ferm xm, p 567 (1884) Heterotomana, Knh Faun Hawanensis, m, pt 11, p 132 (1902)

Since Reuter founded this division in 1875 he has considerably subdivided it. One of these new divisions (Dicypharia) † I have

† Renamed Campyloncuraria (Kirk Faun Hawanensis, in, pt 11, p. 188, 1902)

^{*} Kirkaldy, in his diagnosis of the genus, writes "scutellum not sulente". He probably described an imperfect specimen

failed to adequately understand, at least sufficiently to give diagnostic characters, and it is, therfore, probably included here

in the Cyllocorania

The body is usually elongate, the pronotum anteriorly more or less distinctly constricted, the femora seldom incrassated. The division possesses a somewhat common generic facies, though Sthenaridea, like the Palæarctic genus Heterocoi dylus, has a foreign aspect, but Reuter himself has located the species in his Cyllocorai ia, and we necessarily follow his lead.

Synopsis of Genera.

A Antennæ long, slender

a Body broad, ovate.b Body more or less elongate.

a. Head globose, pronotum anteriorly

spined

b. Head transverse, pronotum not spined
a'. Eyes longly projecting beyond
anterior pronotal angles, conum

b' Eyes not longly projecting beyond anterior pronotal angles, corium with an apical cellular process

B Antennæ short and thickened

Sthenaridea, p. 474

NICOSTRATUS, p. 475.

CYRTORRHINUS, p 476

ZANCHIUS, p. 477. GALLOBELICUS, p. 477.

Genus STHENARIDEA

Sthenandea, Reut Ent. Tulski v, p 197 (1884)

Type, S. pusilla, Reut

Distribution Oriental Region.

Body ovate, shining, head one-third narrower than base of pronotum, in front of eyes regularly deflected, and on each side of them obliquely impressed; eyes large, minutely granulate, almost touching the anterior lateral angles of pronotum; rostrum almost reaching the apices of the posterior coxe; antennæ longer than half the body including hemelytra, first joint not passing apex of clypeus, last two joints together much longer than the second joint; pronotum short, trapezitorm, lateral margins nearly straight, anterior callosities barely discernible, without an apical stricture, and with no transverse sulcation; scutellum somewhat large, subtriangular, hemelytra longer than abdomen, cuneus shorter than broad, the fracture profound; membrane with two areolets or cells

Dr. Reuter remarks that this genus is allied to Heterocordylus, Fieb., but in superficial appearance more closely to Sthenarus, Fieb, belonging to the division Plagionatharia. However, Reuter has placed it in his division Cyllocoraria, where we naturally

leave it.

1454. Sthenaridea pusilla, Reut. Ent Tidski v, p. 198 (1884).

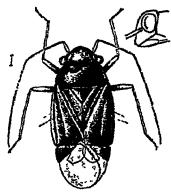


Fig 306.—Sthenaridea pusilla

Black, fuscous or reddish-black, shining, slightly griseous pubescent, second joint of antennæ excluding basal fourth, lostrum, apices of anterior and intermediate femora, the tibiæ and tarsi ochraceous; apex of last joint of antennæ fuscous, tibiæ finely spinulose; membrane fuliginous

Var. Second and third joints of antennæ sometimes wholly ochra-

ceous.

Length, Q, $2\frac{1}{2}$ millim.

Hab Bengal (Copenhagen Mus). By the kindness of Dr. Meinert

I have been enabled to figure the type of this species.

Genus NICOSTRATUS, nov.

Type, N. balteatus, Dist. Distribution. Ceylon,

Body elongate, head globose, almost circular, eyes moderately large but not exserted, adpressed to head, antennæ with the first joint shorter than head, second a little incrassated towards apex and almost as long as lateral margin of corium (excluding cuneus), third a little longer than fourth, rostrum passing the anterior coxæ; pronotum globosely tumid, deflected anteriorly, where it is strongly constricted, and behind a narrow anterior collar armed with two strong divergent spines, posterior margin slightly concavely sinuate, scutellum developed in a strong robust upright

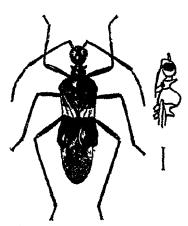


Fig 307—Nicostratus balteatus clavus behind scutellum, bases of intermediate and posterior femora, posterior acetabula, and a

tuberculous spine; clavus distinctly raised and deflected on each side; cornum with the lateral margins concavely sinuate, widened and tumid at apices; cuneus posteriorly deflected, a little longer than broad; membrane considerably passing the abdominal apex; legs moderately long and slender.

1455. Nicostratus balteatus, sp n

Black, shining, basal annulation to third joint of antennæ, a transverse fuscia crossing corium and clavus behind scutellum, bases of subapical annulation to tibiæ white, tarsi (excluding apices) and basal joint of antennæ pale ochraceous; membrane very dark opaque, fuliginous; glabrous, shining, eyes opaque, posterior angles of pronotum subprominent and subacutely deflected

Length 4½ millim.

Hab. Ceylon (Lewis).

Genus CYRTORRHINUS.

Cyrtorhinus, Freb Wren. ent. Monatsb ii, p 313 (1858).
Cyrtorrhinus, Reut Act Soc Sc. Fenn xiii, p 379 (1884), Ofv.
Finsh Soc Forh xliv, p. 178 (1902).
Tytthus, Freb Wren. ent. Monatsb viii, p 82 (1864)
Sphyracephalus, part, Dougl & Scott, Brit Hem p. 349 (1865)
Periscopus, Bredd Deutsch. ent Zeit 1896, p 106
Breddiniessa, Kirk Wien. ent Zeit. xxii, p 13 (1903).

Type, C. cariois, Fall, a Palearctic species.

Distribution Palearctic and Oriental Regions

Elongately ovate, head vertical, transverse, short; eyes large, contiguous to the anterior margin of the pronotum but longly projecting beyond it; rostrum reaching the intermediate coxes, antenne long, slender, first joint moderately thickened, second shorter than the last two joints together; pronotum trapeziform, basal rather more than twice the width of anterior margin, lateral margins strongly sinuate; legs moderately long, posterior tarsi with the second and third joints equally long.

1456. Cyrtorrhinus lividipennis, Reut. Ent. Trdshr. v, p 199 (1884)

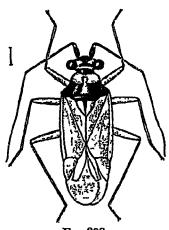


Fig 308 Cyrtorrhinus lividipennis

Black; base of head confluent with a large spot on inner side of each eye, antenniferous tubercles and apex of first joint of antennæ, rostrum, anterior callosities and a broad central fascia to posterior area of pronotum, a large lateral spot on each side of scutellum, the hemelytra, body beneath and legs flavescent, a lateral sternal spot black.

Length 24 to 31 millim.

Hab. Ceylon, Yatıyantota (Green). Burma; Rangoon (Fea). Great Nicobar (Copenhagen Mus)

An apparently abundant species in Ceylon, where Mr. E E. Green found it coming to light. By the courtesy of Prot. Memert I have examined the type

Genus ZANCHIUS, nov.

Type, Z. annulatus, Dist Distribution Ceylon.

Elongately ovate; head broad, deeply channelled near unner margins of eyes, in front of which it is vertically deflected, eyes moderately exserted and situate nearer to the insertion of antennæ than base of head; rostrum reaching the posterior coxæ; antennæ long, basal joint about as long as head, second nearly four times longer than first, third and fourth almost subequal in length; pronotum somewhat strongly constricted before middle, lateral margins nearly straight, basal margin sinuate, mesonotum exposed; scutellum subtriangular; corium with a distinct cell-like process at apex; cuneus longer than broad; legs somewhat long and slender, posterior femora moderately thickened

1457. Zanchius annulatus, sp 'n

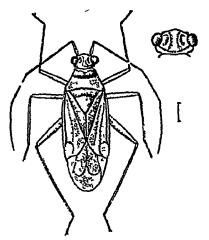


Fig 309 —Zanchius annulatus

Strammeous; eyes, two annulations to second joint of antennæ, the whole of third and fourth joints, and the apices of the tarsi fuscous; head deeply channelled near inner margins of eyes, anterior area of pronotum tumid; corium, cuneus and membrane a little paler than other parts of upper surface; lateral margins of corium a little reflexed, hemelytra very finely tomentose.

Length 4½ millim.

Hab. Ceylon, Peradeniya
(Green).

Genus GALLOBELICUS, nov.

Type, G. crassicornis, Dist Distribution. Oriental Region.

Elongate; head robust, vertically deflected in front; eyes large, insetted about midway between base of head and insertion of antennæ, antennæ short, robust, first joint slightly shorter than head, second a little more than twice as long as first, third about as long as second; rostrum about reaching the intermediate coxæ; pronotum narrowed anteriorly, with a distinct anterior collar, transversely constricted before the middle, with a distinct central longitudinal sulcation; mesonotum exposed; scutellum subtriangular, a little tumid; hemelytra with the lateral margins straight, cuneus much

478 CAPSIDÆ

longer than broad; membrane considerably passing abdominal apex; legs of moderate length and slender.

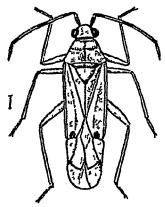


Fig 310
Gallobelicus crassicornis.

1458. Gallobelicus crassicornis, sp. n.

Stramineous; eyes, basal joint of antennæ excluding apex, base and apex of second joint, apex of scutellum, a spot at apex of corium, a similar spot at apex of cuneus, and extreme bases of tibiæ black; third and fourth joints of antennæ fuscous; above finely tomentose; pronotum finely and obscurely punctate.

Length 3 millim.

Hab. Bor Ghát (Diwon). Tenasserim; Myitta (Doherty).

Division ----?

Genus ARMACHANUS, nov.

Type, A. monoceros, Dist.

Distribution Ceylon and North-west Australia.

Body elongate, head robust, long, not sulcate, the eyes nearer apex than base, with an apical spinous protuberance, antennæ

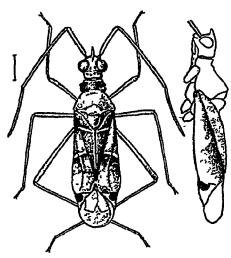


Fig. 311 —Armachanus monoceros

robust, the first joint about as long as head from base to apex of frontal protuberance, second joint about twice as long as first; rostrum just passing the anterior coxe; pronotum elongate, strongly constructed before middle, whence to apex its lateral margins are roughly dentate, the posterioi area tumid, the base uncovered; scutellum carinately gibbous; hemelytra long, the clavus almost vertically long, raised inwardly; lateral margins of corium sinuate. a little widened

tumidly raised posteriorly; cuneus almost as broad as long, the fracture acute; legs long and slender.

This genus clearly represents a distinct division, and I have recently described a second species from N.W. Australia. At present its greatest affinity is with Nucostratus (antè, p. 475).

1459. Armachanus monoceros, sp n

Pale brownish-ochraceous; a transverse linear white fascia crossing clavus near apex of scutellum, and an oblique similar fascia near middle of corium, scutellum, clavus, and central area of commun darker in bue; caneus with a large prominent basal black spot, membrane very pale fuliginous; eyes slaty-grey; body beneath and legs unicolorous.

Length 6 millim

Hab. Ceylon; Yatiyantota (Green).

Division LABOPARIA.

Laboparia, Reut Act Soc Sc Fenn xiii, p 567 (1884) Halticaria, Kul Faun Hawaiiensis, iu, pt 11, p 139 (1902)

In this division the pronotum is without a transverse constriction; the head broad, rostrum very robust, and the posterior coxe placed somewhat close together and remote from the lateral margin of the corium.

Synopsis of Genera.

A Antennæ longer than body HALTICUS, p 479

B. Antenne much shorter than body.

a. Broad; lateral margin of corium convex; BILIA, p. 480.

cuneal fracture very profound . . . b Elongate, lateral margin of corium parallel; cuneal fracture indistinct BERTA, p 481.

Genus HALTICUS.

Haltreus, Hahn, Wanz Irs i, p 113, pl. 18, ff A-D (1831); Burm Handb ii (1) p 277 (1835), Fieb Eur. Hem pp 69 & 281 (1861), Reut. Act Soc Sc. Fenn xxii, p 17 (1897), et syn Astemma (part), Amy & Serv Hém. p 284 (1843) Halticocoris, Dougl. & Scott, Brit Hem p 478 (1805)

Type, H. apterus, Linn., a Palæarctic and Nearctic species Distribution Nearctic, Neotropical, Palæarctic, and Oriental Regions. Probably more widely distributed, though unrecorded.

Broadly subovate; head short, broad, laminately flattened posteriorly and a little produced above the anterior margin of the pronotum, eyes large, touching pronotum; antennæ long, slender, longer than the body; rostrum robust, reaching the intermediate coxe, pronotum short, broad, tumid at basal area, deflected anteriorly; scutellum of moderate size, subtriangular, hemelytra converly deflected on each side, the cuneus and membrane posteriorly deflected; posterior femora strongly incressate; tabia apinously setose.

1460. Halticus minutus, Reut. Ent Tidshi. v, p. 197 (1884)

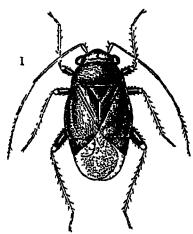


Fig 312 -Halticus minutus

Black, shining, above somewhat pubescent; first, second, basal area of third, and base of fourth joint of antennæ, apices of femola, tibiæ and tarsi very palely flavescent, apices of tarsi black, second joint of antennæ about equal in length to the lateral margin of the corium, its apex frequently black; third and fourth joints (base excepted) fuscous, pronotum obsoletely transversely strigose

Length 1½ to 13 millim.

Hab Ceylon: Perade

Hab Ceylon; Peradeniya (Green) — Singapore (fide Reuter). Cochin-China.

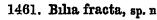
Mr. E E. Green informs me that the species simulates a Hal-

ticid beetle, and leaps in the same way It punctures the leaves of a species of *Ipomæa* Prof Giard (C. R. Soc Biol. (n. s.) iv. pp 79-82, 1892) has described its injurious action in Cochin-China.

Genus BILIA, nov.

Type B fracta, Dist Distribution. Ceylon

Broadly suborate; head broad, strongly deflected in front of eyes, which touch the anterior margin of the pronotum, antennæ with the basal joint very short, second at least twice as long as first, subequal in length to third, second and third setose, rostrum short, reaching the anterior coxæ, pronotum broad, a little deflected and laminate on each side, somewhat strongly pilose, the anterior area behind head glabrous, beyond which it is slightly impressed, but not transversely constricted; scutellum small, strongly transversely striated, depressed on each side; corium converly laminately produced; clavus obliquely suberect, almost at right angles with corium, cuneus a little longer than broad, cuneal fracture exceedingly profound, membrane longly passing the abdominal apex; legs of moderate size.



Black, strongly palely pilose; extreme apex of head brownish-ochraceous; antennæ, rostrum and legs pale strammeous; membrane pale fuliginous, its basal area piceous; pronotum (excluding glabrous area behind head) finely transversely striate; corium finely punctate; scutellium transversely, somewhat rugosely striate

Fig 313 —Bilia freela Length 1½ milhm.

Hab Ceylon, Peradeniya (Green).

Genus BERTA.

Berta, Kerk. J. Romb N II Soc viv, p 57 (1902).

Type, B lankana, Kirk Distribution. Ceylon

Priose; head very small, almost roundly perpendicular; antenuæ with the second joint subincrassate, thickened towards the apex, much longer than first; rostrum reaching the intermediate coxæ, pronotum and prosternum convex, the former not constricted, lateral margins rounded, not sinuate, posterior margin very slightly sinuate, scutellum moderately large and tumid; corium including cuneus passing abdominal apex, cuneus a little longer than broad; membrane with two basal lateral cells, the innermost very small.

1462 Berta lankana, Kuby (Capsus), J Linn Soc, Zool xxiv, p 107 (1891), KuL. (Berta) J Bomb N H Soc xiv, p. 57, pl. A, f 7, pl. B, f. 5 (1902)

Head, pronotum, and scutellum black, shining, antennæ black,

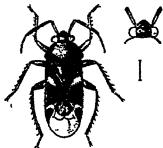


Fig 314 -Berta lankana.

with the bases of the first and third joints very pale stramineous; eyes stramineous; corium and cuneus shining piceous, a white transverse fascia a little beyond base of corium and a similar fascia at base of cuneus, membrane pale fuliginous, subhyaline; abdomen beneath with a broad basal transverse white fascia; scutellum finely transversely striate.

Length 4 millim.

Hab. Ceylon; Nitagala, Pundaluoya (Green).

Division PLAGIOGNATHARIA.

Plagnognatharia, Reut Bih Vet.-Ak Handl 111, 1, p 7 (1875). Chlamydataria, Kuk Faun. Hawanensis, 111, p 131 (1902)

The narrow clypeus, distinctly carnately compressed, is the principal structural character that distinguishes this division; the surface is also more or less shining.

Synopsis of Genera.

A. Body pilose; second joint of antennæ considerably longer than breadth of head including eyes

Psullus, p. 482.

B Body pubescent, second joint of antenne about equal in length to breadth of head including eyes

Самругомма, р. 488

Genus PSALLUS.

Psall Fieb Wien ent. Monatsb 11, p. 320 (1858), 1d Eur Hein pp 74 & 305 (1861), Reut Act. Soc Sc Fenn XIII, p 101 (1884)

Apocremnus, Fieb Wien ent Monatsb 11, p 320 (1858)

Apocremnus, Fieb Wien ent Monatsb 11, p 320 (1858)
Agalhastes (part), Fieb Eui Hem. pp 74 & 310 (1861)
Atractotomus (part.), Fieb Eui Hem pp 71 & 294 (1861)
Liops (part), Fieb. Veih z-b Ges., Wien, xx, p 254 (1870).

Type, P. roseus, Fabr., a Palæarctic species

Distribution. Probably universally distributed, but not yet

recorded from the Ethiopian Region.

Body oblong, sometimes subelongate (3), or oblongly ovate or ovate in 2, above more or less palely pilose; head vertically inclined; clypeus distinctly prominent, compressed; eyes somewhat large, generally strongly granulate; rostrum reaching or passing the intermediate coxæ; antennæ with the second joint in the 3 longer than in the 2 and a little thickened apically; pronotum short, apical margin straight or nearly so, lateral margins straight, base truncate; posterior femora a little incrassate

The male is more elongate than the female, and the sexes sometimes vary considerably in colour.

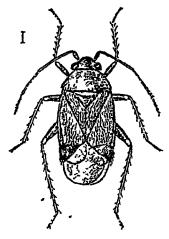


Fig 315 —Psallus singalensis

1463. Psallus singalensis, sp. n

Black, thickly palely pilose; lateral marginal areas of the corium obscure brownish-ochraceous; cuneus pale castaneous, membrane fuliginous, its apical margin paler; femora piceous, their apices, the whole of the tibie, and tars: (excluding apices) ochraceous; antennæ with the first joint black, second ochraceous with its apex fuscous, third and fourth rostrum and trochanters fuscous. brownish-ochraceous, tibiæ speckled with fuscous; corium and cuneus densely, pronotum and head less thickly palely pilose

Length 2 millim

Hab. Ceylon, Peradeniya (Green)

Allied to the Palæarctic species P. obscurellus, Fall

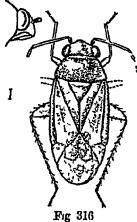
Genus CAMPYLOMMA

Campylomme, Reut Act Soc Sc. Fenn xui, p 52 (1884) Agalliastes (part), Fieb. Eur Hem pp 74 & 310 (1861) Atomoscelis (part), Reut Bih. Vet-Al. Handl in, 1, p 57 (1875)

Type, C nigronasuta, Reut, a Palæarctic species. Distribution. Palearctic and Oriental Regions

Body ovate, pubescent; head shining, vertical, short, rotundately triangular, with eyes a little broader than anterior margin of pronotum; antennæ with the second joint about equal to breadth of head; pronotum shortly trapeziform; posterior femora incrassated, largely punctured with black; tibiæ blackly punctate and spinulose, rostrum reaching the posterior core, membrane biareolate

1464. Campylomma livida, Reut Ent Tidski. 1, p 199 (1884)



Campylomma in ida

Pale ochraceous; head medially testaceous, first joint of antennæ (base and apex excepted) and extreme base of second joint black, femora sparingly speckled with black, posterior femora with three large black punctures on apical half beneath, spinules to tibite black, second joint of antennæ equal to breadth of head and about one-third shorter than base of pronotum

Length, J. 24 millim

Hab Bengal (Copenhagen Mus)

I am much indebted to Di. Memert for the opportunity of figuring this species.

Subfamily III. ISOMETOPINÆ.

Isometopidæ, Fieb Wien. ent Monatsb iv, p 259 (1860). Isometoparia, Reut. Bih Vet -Ah Handl in, 1, p 60 (1875)

The Isometopinæ, founded by Fieber as a family, and treated by Reuter as a division, are here considered, as previously explained, a subfamily of the Capsidæ. Their principal characteristic is the presence of distinct and well-developed ocelli; in some genera also the scutellum is elongately produced, and in another genus subsequently described the eyes are extremely large and almost meet above the head. The Isometopinæ are at present little known, and but few genera and species are recorded. They are minute insects, and require special search and collecting.

VOL II.

Synopsis of Genera.

A Scutellum long and angularly produced, eyes of moderate size and placed wide apart

a Head including eyes very little incrower than anterior margin of pronotum, lateral margins of scutellium sinuate

b Head including eyes much natiower than anterior margin of pronotum, lateral margins of scutellium obliquely straight

B Scutellum small, eyes extremely large and almost meeting above head

Isometopus, p. 484

Turnenus, p. 485

Sophianus, p 485

Genus ISOMETOPUS.

Isometopus, Fieb. Wien ent Monatsb iv, p 259, pl vi a (1860), id Liu. Hem. pp. 61 & 237, Reut Bih Vet-Ah Handl in, 1, p. 61 (1875)

Type, I intrusus, H -Sch, a European species Distribution Palearctic and Oriental Regions.

Somewhat broadly ovate, head broad, rounded in front, occiling present and distinct; antennæ absent in the Burmese example here enumerated, but described in typical examples as having the third and fourth joints slender, rostrum reaching the second abdominal segment, pronotum much broader than long, the lateral margins convexly rounded, mesonotum exposed in a lobate process on each side, scutellum long, narrowed posteriorly, hemelytis conveyly ampliated on each side; cuneus broad

converly ampliated on each side; cuneus broad

I feel no doubt that the single Burmese specimen now before
me, minus legs and antennæ, belongs to this Palæaictic genus

1465 Isometopus feanus, sp n

Brownish-ochiaceous, head and lateral areas of pronotum and corium paler in hue; membrane pale fuscous with the lateral

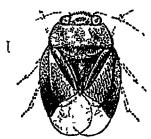


Fig 317 -Isometopus featus

and apical areas greyish; eyes pale reddish; head with a distinct discal transverse impression between eyes, the ocelli very much nearer to eyes than to each other, pronotum finely transversely rugulose, with a central short longitudinal impression on anterior area, scutellum triangularly foveate at base, beyond which it is finely transversely rugulose, corium finely rugulosely punctate, its lateral margins slightly reflexed

Length 2 millim.

Hab. Burma, Palon (Fea).

Genus TURNEBUS, nov.

Type, T. cuneatus, Dist Distribution Ceylon

Broadly orate, head short, broad, anteriorly rounded, but, including eyes, much narrower than anterior margin of pronotum; ocelli distinct and placed near eyes, antennæ finely setose, basal joint scarcely passing lateral margins of head, second about the length of third and fourth together, the last two slender, rostrum long, extending through two-thirds of the abdomen from base; pronotin short, broad, punctate, very much broader than long, the lateral margins convexly rounded, the posterior margin bisinuate, the anterior angles distinctly subacutely prominent, mesonotim exposed, soutellum very long, angularly and regularly attenuated from base; corium with the lateral areas convexly ampliated; cuneus longer than broad, legs short and slender

1466 Turnebus cuneatus, sp. n



Fig 318 Turnebus cuneatus

Head, pronotum, mesonotum, scutellum and sternum ochraceous, eyes, first and second joints of antenne, corum, rostrum, abdomen beneath, and intermediate and posterior femora black, apex of rostrum ochraceous; above somewhat coarsely punctate and shortly pilose; membrane pale smoky hyaline; antennæ finely, palely setose; lateral margins of prenotum distinctly reflexed

Length 3½ millim

Hab Ceylon, Pundaluoya (Green)

Genus SOPHIANUS, nov.

Type, S alces, Dist Distribution Ceylon

Otate, head broad, deflected anteriorly, the eyes very large and broad, coarsely granulate, nearly meeting on vertex and almost touching the anterior margin of the pronotum, two distinct and prominent ocelli placed between the eyes; antenns with the first joint short and globosely incrassate, second joint about four times as long as first, very widely and laminately incrassate, gradually widened from base, its apex broadly, a little sinuately truncate, the two apical joints very short, the third slender, the fourth moderately thickened; rostrum reaching the posterior coxe; pronotum convexly tumid, deflected anteriorly, with a narrow anterior collar, its posterior margin truncate and about twice as

broad as anterior, its surface sparingly but somewhat coarsely punctate, mesonotum exposed; scutellum somewhat small and moderately tumid, hemelytra broad, finely punctate, cuneus broader than long, membrane longly passing abdominal apex. legs mutilated in typical specimen

1467 Sophianus alces, sp. n

Head, antennæ, pronotum, mesonotum, scutellum, and body beneath black, eyes dull grey; apex of scutellum, hemelytra, and



Fig 319 Sophianus alces

the two apical joints of antennæ dull flavous. aper of clavus, lateral vein to corium, and basal and apical margins of cuneus piceous; membrane very pale fuliginous hyaline; pronotum distinctly coarsely punctate, corium obscurely pilose and obsoletely finely punctate

Length 2 millim

Hab Ceylon, Yatıyantota (Giecn)

I have received a single specimen of this. the most extinordinary Capsid with which I am acquainted, the large eyes giving it a somewhat Saldord appearance Its position in the Isometopine is however clear, and in that view I am supported by my friend Mr. E Saunders, whose opinion I was glad

to receive on the question

Species of Capside known only by descriptions and which I have failed to identify

1468. Capsus albipes, Motsch Bull. Soc Nat Mosc xxx11 (2) p 82 (1863)

Black; head rufous; lateral margins of hemelytra and the legs white, head triangular, shining, front foveolate, apex of clypeus and the eyes fuscous-black, pronotum transversely trapezitorm, subconvex, strongly punctate, scutellum triangular, rugosely punctate, posteriorly elevated, shining, hemelytra medially moderately dilated, posteriorly attenuated, membrane unicolorously opaque, anteriorly very distinctly punctate; body beneath black Length " 3 to 2 line"

Hub Ceylon, Patannas (Patna?) Mt (fide Motschoulsky)

1469 Deræocoris rubrovulneratus, Motsch Bull Soc Nat Mosc 22xr1 (2) p 83 (1863)

Black, punctate, thorax shining with its posterior angles, the apex of scutellum, and "avilles geniculisque" rufous-testaceous; CAPSIDÆ 487

the anterior and posterior margins of the membrane mutilated, red; anterior tibiæ somewhat white, head triangular, glabious, shining, the front between eyes with two red or testaceous spots, eyes transverse, prominent, fuscous-cinereous, pronotum transversely trapeziform, shining, strongly punctate, subconvex; scutellum triangular, rugosely punctate, somewhat shining, hemelytra elongate, the base sparingly punctate, medially moderately dilated; membrane posteriorly truncately sinuate, laterally incised, apex angularly produced

Length "13-2 lines"

Hab. Ceylon, Newera-Ellia Mts. (fide Motschoulsky)

1470 Deræocoris piceoniger, Motsch Bull Soc Nat. Mosc xxxvi (2) p 84 (1863)

Elongate-ovate, shining, piceous-black, rostrum, femora, and antennæ reddish, bases of femora black, tibiæ and tarsi palely testaceous; head large, triangular, impunctate, posteriorly submarginate, front unequal, eyes ovate, convex, distinctly granulose; antennæ with the first joint half as long as head, second three times longer, pronotum strongly transversely trapezitorm, moderately convex, impunctate, posteriorly a little deflected, anteriorly narrower than the head, posterior angles moderately rounded; mesonotum strongly transversely arcuated, scutellum triangular, impunctate, anteriorly a little deflected; hemelytra as broad as pronotum, impunctate, subparallel; appendices somewhat distinct, furnished with a parallel lateral vein, legs robust, tibiæ sparingly setose

Length " 3 line " Hab. Ceylon near Colombo (fide Motschoulsky)

1471. Leptomerocoris alboviridescens, Motsch Bull Soc Nut Mosc xxxv1 (2) p 85 (1803)

Elongate, nearly parallel, depressed, shining, whitishly pilose, white with a greenish tinge, head, pronotum, and scutellum paler; eyes of moderate size, strongly prominent, shining, piceous-black, antenne with the apex of the second joint red; head triangular, smooth, the vertex subconcave, posteriorly transversely impressed. pronotum subconcave, trapeziform, anteriorly glabrous, and narrower than head, posteriorly irregularly punctate, dilated, base medially sinuate, posterior angles distinctly rounded, laterally concavely subarcuated, mesonotum concealed, scutellum triangular. impunctate, medially impressed, hemelytra of the breadth of pronotum, elongate, posteriorly roundly subattenuated, almost hyaline, pilose, lateral vein parallel, appendices indistinct, legs long, slender, subobscurely varied, tibiæ nude Length "14 line"

Hab Ceylon; Patannas (Patna?) Mt (fide Motschoulsky).

488 CAPSIDÆ

Specimens described by Walker, but of which the types are non-existent, and which may probably have been suppressed without record.

Capsus semiclusus, Walk. Cat. Het vi, p. 118 (1873). Hab. Ceylon.

Capsus subrroratus, Walk Cat Het vi, p. 119 (1873) Hab. Ceylon.

Leptomerocoris simplei, Walk. Cat. Het. vi, p 145 (1873). Hab Ceylon.

Monalocoris bijninctipennis, Walk. Cat. Het vi, p. 159 (1873) Uab Ceylon.

ALPHABETICAL INDEX.

The second secon	
angustatus (Calocoris),	
an gustatus (
Tampo A52 Parite	
albolineatus (Lamno 452 (Peritre angusticollis (Peritre angusticolli	
abbiroviatus (Dieuches), abolineatus (Endo-chus), 75 albomaculatus (Endo-chus), 75 albomaculatus (Amblythyreus), augustus (Amblythyreus), albomaculatus (Budo-chus), 75	
abbreviatus (Dieuches), bates), abomaculatus (Endo-chus), 75 chus), 76 chus), 76 chus), 77 chus), 78 augustus (Amblythyreus), 147 chus), 400 ch	
albomaculatus augustus augustu	
abbreviatus (Dieuclies), 85 abbreviatus (Ectrychotes), abbreviatus (Ectrychotes), alboplagata (Veltra), 317 angustus (Argenis), 217 angustus (Argenis), angustus (Veltra), angustus (Vel	
or with the same of the same o	
ill all and the second	
Abdolominus, (Binsticus), alboriridescens (Arg. annulatus (Acanthas- 435 (Acanthas- 338 (Andus), 154 alboriridescens (Lopto- 435 (Acanthas- alboriridescens (Arg. annulatus (Acanthas- alboriridescens (Arg. annulatus (Acanthas- alboriridescens (Arg. annulatus (Acanthas- annulatus (Acanthas-	
abdominans (Adams Assault Lopus Assault Lopu	
338 the dust 15± albovirus 487 and annum 271 man	
merous and plan and plan	
abdomnas albornus (Aradus), 154 abnornus (Aradus), 154 abnornus (Aradus), 154 ahornus (Aradus), 154 anerocoris), 487 merocoris), 480 alces (Sophianus), 480 Alemena, 300 Alemena, 300 Alemena, 300 alicollis (Collimitus), 300 annulicoriis (Scadri), annulicoriis (Scadri), annulicoriis (Phlegyas), an	
Meaning Homens, 300 (Phleggas),	
Acanthuspus, 277 Acanthuspus, 277 Acanthuspus, 303 Acanthuspus, 399 Acanth	
Acanthaspisarin, 410 135 Acanthas, 404, 410 135 Acanthas, 404, 410 alenus Acanthas, 399 alenus Acanthas, 217 329 Acanthas, 217 329 Acanthas, 217 329 Acanthaspisarin, 410 135 Acanthaspisarin, 410 1	
Acanthina, 303, 390 Acanthinabis, 390 Acanthothorax, 217 Acanthothorax, 217 Acanthothorax, 217 Acanthothorax, 217 Acanthothorax, 217	
Acultion of 217 329 Chyparochio 320 Acultion Oncoception	
Acanthus, 3090 alienus 329 Acanthotorax, 217 alienus 329 Acanthotorax, 156 alien, 150 mus), 89 949 annuipes (Oncocephalus), annuipes (Oncocephalus), annuipes (Oncocephalus), 231 (Scadra), 310	
(Seattle)	
Acorum, 100 mus), 249 acuta (Glossopelta), 181 adelaidis (Gerris), 395 Alleorabrus (Dieuches), 395 Alleorabrus (Dieuches), 343 annulipes (Scadra), 343 annulipes (Sphedano-	
action des (Gerris), (3)) (Hearth recines), annulipes (4)	
Acortum (Glossopetta), 181 adelaidis (Gerris), 205 adjunctus (Reduvius), alternatus (Dieuches), alternatus (Dieuches), 267 alternatus (Dieuches), 267 annulipes (Sphedano-annulipes), 267 annulipes (Sphedano-annulipes), 267	
adjunction (Reduvino) alterna	
adelaidis (Pirates), 253 adjunctus (Pirates), 253 alternatus (Dieuclies), annulica (343 lestos), 237 alternatus (Pichis), 237 annulosa (Lisarda), 237 Altomarus, 48 Altomarus, 48 Altomarus, 48 Altomarus, 48 alutaceus (Pichi nomus), antennatu (Megalocerar) antennatu (Megalocerar) 244 Altomarus, 43 Anorthus, 47 Anorthu	
en uginosus (Perntrechus); alutaceus (Pachynomus); Altomarus, 48 Altomarus, 48 Anorthus, 17 Anorthus, 18 Anor	
alutinosus (alutinosus)	
Grass (Lestonia 6 armsis (Louisius, 142 antennation 498	
annus (Ingelis), torus), torus (Ingelis), torus (Ingelis), torus (Ingelis), torus	
affinis (Prates), 209 Anunianus, 100 (Phyllonto- angliata (Phyl	
attitis (" migh ood on Billip", (1%)	
Agalinstes, 40-7 Agrama, 127 Agrama, 127 Agrandestes, 338 Aproclopius, 338 Aproclopius, 338 Aproclopius, 338 anadyomena (Lygrais), 52 anadyomena anadyomena Aproclam Aphanaria, 78 Aphanaria, 45	
Anicology of the state of the s	
April 14 Manual Min. Out	
	ľ
Trans 160 _ Trans 160 _ This il agnis).	
albeson linuin Vine 401 V ale 1 Variante	
albicornis Angerratis (Reduvius), appear	5
410/ 306/ 100 -00/10/10/	
albipennis (Aradus), 480 albipes (Capsus), 486 albipes (Capsus), 486 angularis (Acanthaspis), apicicornis (Olerando, apicicornis (Olerand	
albofasciata (Physiopera infinite angula (Alemena), Apiomerina, vac	
97 angusta (Tyraquel angusta	
of annual Liver and and annual	
albofascintus (Tyraquel angusta albofascintus (Tyraquel 370	
lush sinta (Inara)	
alboinscian, 171 lus), 471 alboguttata (Inara), 278	

Apocremnus, 482 Appolonius, 62 Aprepolestes, 332 apterus (Halticus), 479 apterus (Nabis), 399 upterus (Pyrihocoris), 116 Aptus, 399 Aquarius, 176 Aradidæ, 153. Aradını, 153 Aradus, 153 araneus (Eugubinus), 206 Arcesius, 350 archetypus (Entisberus), arcuatus (Pirates), 300 Argenis, 434 argentata (Gerris), 180 argentatus (Graptostethus), 9 argiliaceus (Melanotelus), argillaceus (Reduvius), 238 Arictus, 159 Ai machanus, 478 armata (Gerris), 180 armatissimus (Polididus), armipes (Irantha), 385 Arocatus, 15 Arrianus, 74 Artabanus, 157 Artemidorus, 33 Artheners, 17. asiaticus (Lygaus), 6 asiaticus (Pictinus), 163 Aspicelus, 439 Aspilacoryphus, 11 Aspilaspis, 399 assamensis (Lethæns), assamensis (Ninus), 20 assamensis (Teleoneinia), 143 Astacops, 3 Astemma, 118, 479 ater (Capsus), 468 ator (Sycanus), 356 utkinsoni (Artabiinus), 159 atkınsonı (Mırıs), 423 atkınsonı (Rhaphidosoma), 330 atkınsonı (Stenolæmus), 204 Atomoscelis, 483 atra (Teleonemia), 143 Atractophora, 40

Atractotomus, 482 atricapilla (Serenthia), 127 atucapillus (Coranus), 382atucapillus (Endochus), 367 atripennis (Ectrychotes), 317 atrispinus (Endochus), 369 atrispinus (Epidaus), 372 atrocyaneus (Sycanus), 356 atromaculatus (Pirates), 301 atromaculatus (Quercetanus), 311 atropictus (Audernacus), 306 atrox (Ectomocoris), 296 Audernacus, 306 augur (Cimex), 101, 112, 113 augur (Dysdercus), 112 Aulacosphodrus, 339 australasıœ (Opisthoplatys), 221 austialis (Astacops), 3 autolycus (Lygeus) 8 avidus (Bagauda), 208 Ayıerus, 140 azalaias (Dindymus), 113 Bæbius, 227 Bæcula, 171 buerensprung: (Sastrapada), 224 Baganda, 207 balteatus (Nicostratus), 475 Baptista, 173 barbarus (Ischnonyctes), 216 Bartacus, 374 basalis (Henicocephalus), 195 tasicornis (Cymus), 145 busigei (Pirates), 303 basıptera (Pasıra), 255 Bayerus, 307 bengalensis (All corliynchus), 394 bengalensis (Rhyparochromus), 82 bengalicus (Lygus), 457 Beosarm 78 Beosus, 79, 82 Berta, 481 (Allæocrabiannulipes num), 249

Biasticus, 337 bicolor (Dindymus), 110, bicolor (Drymus), 92 bicolor (Epidaus), 373 bicolor (Gardena), 214 bicolor (Mendis), 312 bicolor (Oxycarenus), 41 bicolor (Pirates), 300 bicoloiatus (Harpictor), 333 bicoloripes (Pirates), 299 bidentata (Pygolampis), bifidus (Sycanus), 353 biguttatus (Pachynomus), 390 biguttatus (Peirates), 300 biguttula (Acanthaspis), Bilia, 480 biligata (Acanthaspis), bilobiceps (Artabanus), 159 bimaculata (Physopelta), 97, 109 bimaculatus (Panthous). 380 binghami (Acanthaspis), 266binghami (Carcinocoiis), 151, 152 bipunctata (Sastrapada), 224bipunctatus (Ecunoderus), 326 bipunctatus(Ligyrocoris), 52bipunctatus (Melanotelus), 12 bipunctipennis (Monalocoris), 488 bipustulata (Pasiropsis), 255bisbisignata (Edocla), 274 biseratensis (Lygus). 457 bisignata (Mesovelia), 169 bispinus (Primierus), 61 bistillata (Acanthaspis), Bleteogonus, 79 Blissinæ, 21 Blissus, 27, 28 Boccharıs, 36 Bochrus, 23 Bosbeguius, 64 boschjesmana (Tribelocephala), 220

At 2
TELETEETICAT INTEL.
Calagra 414 442 and consistent (Vanthashis)
1 400 Comme to Marine
Colorge 445 Colored (Require) Colored 445 Colored (Require) Colored 445 Colored (Require) Colored 445 Colored (Require)
and the second of the second o
Bedriomir 460 Care and Care an
Red Torrales Carbonate
Beitrional (Homaicephotosis and Christian) (Anniceptis 171). Connecerts 171. Connecerts 1
are Detaloping Chamber (Messen and St. 1911 whitim.
b-schills (Petalo-birus), dr. s'. 220 b-schills (Petalo-birus), dr. s'. 220 b-schills (Petalo-birus), dr. s'. 220 cardnels (Prerhopophus), englens (Inductus) cardnels (Prerhopophus), dr. s'. 220 c
July sanchine; 50 July 1777
Brachrivachine, 150 carduchs (L. trorrhinus) Brachrivachine, 207. Brachrivachine, 207. Brachrivachine, 207. Brachrivachine, 207. Cyrtorrhinus) carduchs (L. trorrhinus)
Drag - and Blan,
Brachy 573 Brasirola, 573 Perutopus), 476. (Ardors, the Cardors, the C
Brasirela, 513 Breddin (Peritopus), 175. Breddiness, 476 Breddiness, 476 Breddiness, 476 Cardops, the Cardops
Designing and 100 City
Bredenbachula, (Kabis), 227 156 cingular (Sinterlia), brevilneatus (Kapis), Carrenocoris), cingulalists (Sinterlia), cingulalists (Sinterlia), cingulalists
Breddinschus, 10s, 10s, 15s, 15s, 15s, 15s, 15s, 15s, 15s, 15
302 ms (Da 160 mn) (III (11) min
brevipennis (Budacus), cartillo (Cartino cuigalenes), liber pennis (Catamiarus), brevipennis (Catamiarus), catullus (Logus), 457, cingulatus (Diederous), liber pennis (Catamiarus), catullus (233, cingulatus), liber pennis (Catamiarus), catullus (233, cingulatus), liber pennis (Cartino cuigalenes), liber pennis (Cartino cuigalenes
The state of the s
OPT
(Metro cohromus), Caveleriu 187 114. Composition (China
brevis (Metrocochromus), brevis (Rhyparochromus), brevis (Rhyparochromus), Careleriu 137 Oclantin, 137
brevis (Metrocotromus), brevis (Rhypsrochromus), Caveleriu, 197 Celantin, 197 Celantin, 197 Celantin, 197 Celantin, 197 Cenaus (Dindy mus), centralis (Technodemus), centra
t-original contract the contrac
158 MR. 471 Oligeners out Oligeners with 101 of
DITAL TO LINE TO THE TOTAL TO CONTRACT TO THE
Direct married (Trees, Carried Cooper, and Alle Cityles,
100 July 1000 Ju
corist Totaloculation College 18.
coris). (Petalounta Coromasiix, (Nysius), 18. (Intelligraphia cognitis) (Mysius), (12. (Intelligraphia), (13. (Intelligraphia))
coris), 450 (Petaloohirus), Corifons, 250. Cerifons, 250. Cerifons
miliano (cc) 1 mobilities (cc)
40 Charles artin, 40 collars (5) 1.11
onetus, 182 chaultops, 30 412 Gollimina 380,
Ondamustus, 132 Charlosor, 35 Check Components, 164 Check Componen
Chapter 183 (Calocomy, Colon,
Colocanthia, 417 chonopour,
1011101 1 201 201 1 1 1 1 1 1 1 1 1 1 1
Calcanting, 417 Callieraldes, 417 Callieraldes, 291 Callieraldes, 451 Calcoris, 451 Canpetobrochis, 460 Camptobrochys, 460 Camp
Oallispinos, 451 Oalocoris, 460 Camptobrochys, 460 Camptobrochys, 483
Cancerts, 460 cheromeans (Mark Compared (Valentite), 230 compared (Valentite), 330 line, (Aradus), 483 compared (Valentite), 483 compared (Valentite), 484 compared (Valentite
Unit 1 and the and appropriate and appropriate
candidatus (Capsus), 420 Chiloxanthus, 407, 140 Cantacader, 123 Cantacader, 123 Chiloxanthus, 407, 140 Chiloxanthus, 407, 407, 407, 407, 407, 407, 407, 407
Cantacader 122 Chimarrhonic 1932 Chimarrhonic 19
Cantacader, 193 Cantacaderaria, 192 Cantacaderaria, 234 Canthesancus, 234 Canthesancus, 234 Canthesancus, 235 Canthesancus, 236 Canthesancus, 237 Chiamydataria, 181
China (Culture) of the 201 (Author) Anticolin (Author)
Candidates (Caunus), (5) capensus (Sunerus), (5) capitatus (Pocoloscitus), capitatus (Pocoloscit
anilatus (vara 98
3º A.W. "A0
Caparia, 474 cincular 63
Capedra, 412 Capside, 412 capsiformis (Naha), 400
cab _{ellor}

consanguinea (Psophis), 244. consanguineus (Pœciloscytus), 459 (Irantha), consobrina 386 consors (Endochus), 366 conspersus (Epidaus), 371 (Yolınus), conspicuus 357 consutus (Polycrates), 64 convelatus (Rhyparochromus), 69 Coptoneurus, 87 coqueberti (Antilochus), **101** corallinus (Reduvius), 333 corallinus (Pailiatus), 395 Coranideus, 332 coranodes (Acauthaspis), 271Coranus, 380 Coranusaria, 380 cordatus (Ectomocoris), 295 cordiger (Ectomocoris), 295 Coriscina, 397 Coriscus, 399 coronatum (Gonycentrum), 125 Cosmolestes, 345. Cosmopleurus, 5 Cosmosphodrus, 351 costalis (Harpactor), 334Costiella, 217. Courtesius, 114 Craspeduchus, 5. (Rhyparocrassiceps chromus), 78 (Gallobelıcrassicornis cus), 478 crassirostris (Steno-Jæmus), 203 Creontindes, 427 Crescentius 408 oribraticollis (Gorpis), 398 (Phytocoris), crimitus 449 Critobulus, 77 (Cydnocoris), crocatus croceovitatus (Sycanus), 352erœsus (Capsus), 468 cruciatus (Pirates), 299

crudelis (Ectry chotes). 316 cruentus (Lygeus), 112 CT112 (Physorhynchus), 318 Ctenocnemis, 224 cumingi (Rosahus), 303 cunentus (Bayerus), 307. cuneatus (Turnebus), 485 (Ectrychotes), cupreus 316 currens (Velia), 172 Cutocoris, 361 cyaneus (Ectomocoris), 203. Oydnocorıs, 361 Cylaparia, 433 Cylindi stethus, 184 Oz llocoraria, 473 Cymbidus, 284 Cymnnæ, 19 Cymus, 17, 21. Cyrtorhinus, 476 Cyrtorrhinus, 476 Oysteochila, 138 Dalyrta, 369 Darbanus, 363 darsius (Capsus), 469 darthula (Galeatus), 131 davidi (Cnizocoris), 149 dearmata (Centrocnemis), 246debilis (Reduvius), 251 decisus (Pirates), 204 Decrus, 221 decoloratus (Lygus), 455 decorus (Dysdercus), 121 delmeatus (Rhyparochromus), 52 dentata (Phyllontochila), denticollis (Carventus), dentipes (Macropes), 26 dentipes (Rilarbus), 378 depressus (Homalosphodrus), 349 Deræccoris, 451, 465 Dermatinus, 115 descriptus (Lethicus), 89 deyroller (Centrocnemis), 245 Diaditus, 226 Dicephalus, 193 dichrous (Villanovanus), 364 Dicraotropis, 289

Dieuches, 82 diffinis (Lestomerus), 299 dıssinıs (Pırates), 296 (Eteoneus), dılatatus 129 Diloplios, 10 diluta (Staccia), 225 diluticornis (Cligenes), dilutus (Macropes), 25 dımıdıatus (Mizaldus), 68 Dindymus, 110 Dinia, 73 Diniella, 73 Dinocleptes, 332 Dmomachus, 37 Diognetus, 431 Diphymus, 332 Diplonotus, 51 discessus (Numa), 20 discifer (Oplithalmicus), 31 discifera (Acanthusjus), 260 discognitions (Pleciomerus), 52 discolor (Cerilocus), 288 discolor (Gerris), 178 discolor (Platymeris), 276 discrepans (Ectrichodia), 318, 319 (Ectry chotes), ragarb 315. dispar (Rhodiginus), 62 Disphinctus, 443 distincta (Ectatops), 105 (Sphedanolestes), dives 342divisicollis (Acanthaspis), 267 (Graptostethus), dixoni 10 (Pachygrontha), dixoni 42dixoni (Salda), 405 Dodonœue, 398 doheriyı (Calocoris), 452 doherty: (Lygæus), 7 doherty: (Megalocer.ea), 425 doherytı (Nysius), 18 dohrnı (Agrıo-phodrus), domestica (Pleania), 209. doryous (Pristliesancus), 383 Drymaria, 78 Drymocoms, 92

ALPHABETIOAL INDEX. febriculosa (Helopelius), febriculosa (A38) 84	
cobriculosa (Alta de Cabriculosa)	
erinaceus (Carcinocoris), 440 erinaceus (Carcinocoris), 440 relisacus (Ass (Dieuches), 200 femoralis (Pirates), 200 femoralis (Pirates), 200 femoralis (Pirates), 200	
erinaceus (Carcinocoris): 440 Felisaceus, 438 Felisaceus, 438 (Dieuches), 84 femoralis (Pirates), 299 femoralis (Pirates), 299	
or an amachus, and lor femoralis (Por)	
dubius (Sastrapaua) 902 (Genocoris), eroquis (Mindus (Dinas 219 (Sastrapaua))	
202 (Conversion of the contract of the contrac	
Angles and, allega (Pagui La Log Alexandra)	
- Amoult \ Pij"	
diffice (Property) 4208 361 - sections, 4 250 centreus (Property)	
1.ADEV 189 10 TO ADV. HORE.	
Tilling 982 mells so to the mells	
Duran 150 Grantas of 259 Figure (Grant	
Durganos, 150 Dusius, 150 Eurgoras, 239 Eurgoras, 230 Eurgoras	
Trester Transfer Tran	
Kaco 200	
Editor, restrict, 144 southerness 150 mm and Co.	
Eccritotarsulthia), 144 echiu (Monanthia), 134 echius (Urentius), 134 echius (Urentius), 134 Europeus, 105 Europeu	
Talling and the state of the st	
and the same of th	
Refriction, 304 exertatus (Macropes), and flatter and marry metus),	
Ectrichodillia 34 Ectrychotes, 314 Ectrychotes, 3270 excellens excellens excellens excellens (Pantato flavipes (Altabanus), 363 flavipes (Altabanus), 363 flavipes (Pamera), 35 flavipes (Pamera), 207 flavipes (Pirates), 207 flavipes (Altabanus), 363 f	
Ectry (Omex), 270 9379 (Artabanus), 399 (Pamera), 207	
Ectrychotomers), 270 odleri (Oimers), 274 Edoclo, 274 Edoclo, 274 Edoclo, 274 Edulca, (Pamera), 50 Exemplificatus Exemplificat	
Elasmograthus, dus), dus), dus), dus), Elasmotropis, 135 dus), Elasmotropis, (Displinetus), exiguis (Ectinoderus), exortrus (Ectinoderus), etemma), 393 etemma), 393 etemma), 393	
Elasmotropis, exiguis (Ectanous (Ectanous (Ectanous (Ectanous)) 88 etemps), 393 etemps), 393 etemps), 393 etemps), 393 etemps, 393 etemps), 393 etemps, 393 etemps	
elegans 445 Automotoris), exorer un	
elegens 445 elegens 295 (Labidocoris), 295 Legens (Labidocoris), faber (Melamphaus), favonerginatus favonergi	
295 (Labidocolis) (Memor flavorium (Acanimar)	
elehan e 107 1.200 Distriction 330	
Trender 1 983. A the Condition of Tarpacco 177	
and the property of the proper	
elegate (U) 418 (g. conus), 3 936 Hada (Pigolane	
elongala (Lescondinated Concordinated Concor	
420 011 216 Rum dorrs (Life 19 10 10 10 10 10 10 10 10 10 10 10 10 10	
Emesar, 210 Emesar, 200 familiaris (Epidaus), 233 familiaris (Epidaus), 233 formosus (Disphinctus), formosus (Aspilo formosus (Eucosmetus), 200 formosus (Eu	
Emesina, 200 Emesina, 200 Emesina, 200 Emesina, 200 Emesodema, 200 Emesodema, 305 Endochus, 305 Endo	
Emesonaria 200 masta (Aspito formosus Emesodema, 200 formosus (Aspito formosus formo	
Ello halusi and but to lotte to lotte to 117	
Enteropy 200 Countilly Countilly	.),
Entra 10 10 10 200 10 10 10 10 10 10 10 10 10 10 10 10 1	•
Found 371 sound (Line hyrbynchus) 1015) 17	8
Epinoders, 24 of femus District (German)	3
Entroller (1800)	
equery (Ectorics AR4 Intris) (Factor)	
ereco locatis): tosaus	
Parachite 290	
erobus (Parama 200	
eredus (Lusardu), 230 ereda (Lusardu)	
GP on-	

geniculatus (Artabanus), (Angerianus), fractus 438 frauenfeldanus (Halogeniculatus (Dindymus), bates), 187 fuliginosus (Binsticus), geniculatus (Phalantus). 291 338 fulvescens (Durganda), Geocorina, 29 283Geocoris, 29 Fulviaria, 470 Gerbelius, 253 fulvipes (Acanthaspis), Gerndæ, 176 259 Gerrinæ, 175 fulvomarginatus (Melam-Gerrinaria, 176 phaus), 108 Gerris, 176, 201 funebris (Nabis), 401 gestroi (Amblythyreus), funeralis (Rhopalus), 14 147 (Sphedanogestroi (Baptista), 173 funeralis lestes), 340 gestroi (Carventus), 157 funèrea (Teleonemua), gestroi (Euscopus), 106 143 Ghilianella, 211 funcstus (Petalochirus), gibba (Caridops), 57 gibba (Serenthia), 127 furcata (Mesovelia), 168 gibbus (Blissus), 28 fuscans (Dieuches), 83 Puvleg (Cydnocoi is), (Penates), 361 fuscicornis Gısmunda, 463 glabrata (Diniella), 73 fuscicrus (Scadra), 308 fuscinotum (Oncocephaglabratus (Felisacus), lus), 229 fuscipennis (Coranus), glaucopis (Leotichius), 381 (Smuthogiobosus (Eriximachus), fuscipennis coris), 280 (Durganda), globulifera (Monanthia), fuscipes $28\overline{3}$ 144 fuscipes (Harpacton), Glossopelta, 150 333 Glymmatophora, 318 fuscispinus (Euagolas), Godefridus, 328 Gomesius, 212 fusconervosus (Sufferus), Gonatas, 89 Gonianotaria, 78 fusconigra (Acanthaspis), Gonsalvus, 93 267 Gonycentium, 125 fuscovittatus (Poly-Gorpis, 397 toxus), 219 gracilicornis (Geriis), fusculus (Arcesius), 351 178 fuscus (Pby soderus), 247 grammea (Megalocerata), iuscus (Pinlocerus), 198 124 Fusius, 297 grandis (Iphita), 97 grandıs (Lohita), 95 Galeatus, 131 ginnulatus (Androclus), Gallobelicus, 477 289 gallus (Henricohahma), Graptolomus, 5 Graptopeltue, 79 389 gangeticus (Ectomocoi 18), Graptosphodrus, 339 206 Graptostethus, 8 Gardena, 214 greem (Altomarus), 49 Gastroplœus, 371 greeni (Elasmognathus), gelanor (Ectatops), 103 142gemmata (Acanthaspis), greeni (Hydrometra),

170

greeni (Libavius), 313

262

geniculata (Pamera), 54

greeni (Myioplianes), 205 greeni (Plonria), 209 greent (Rhyparochromus), 88 greeni (Sminthocoris), 280greeni (Stenolæmus), 203 greeni (Valleriolu), 406 guerini (Lophocephala), 331 Guisardus, 436 gulo (Acanthaspis), 263 gulo (Canthesancus), 235 gutta (Physopelta), 97 gutta (Rhyparochronus), guttatus (Pendulmus), 82 guttiger {Aspilocolyphus), 11 guttula (Prostemma), 392 guttulatus (Lachnophorus), 69 Gyndes, 51 hæckeli (Hemidiptera), 192Hæmactus, 339 hæmatidens (Pyrrhocor15), 112 Hæmatorrhophus, 318 Hæmobaphus, 5 Halobates, 186 Halobatine, 186 Halobatınarıa, 186 Halobatodes, 188 Halonabis, 399 Halticaria, 479 Halticocoris, 479 Halticus, 479 hampsoni (Carcinocoris), 151 hampson (Megacœ'um), 429 Harpactor, 332, 339 Harpactoraum, 331 Harpactorinæ, 329 Harpagochares, 224 Harpedona, 418 Harpiscus, 332 bastata (Stenopoda), 236 Hebridæ, 167 Hebrus, 167. Helenotus, 39 helferi (Elasmognathus), 142

	11111 14111111 1101111 1111111 11	100
helluo (Acanthaspis), 262, 263	illuminatus (Courtesius), 114	meignis (Ectrichodia), 325
helluo (Canthesancus), 235	illustrarius (Metrocoris), 189	inggnis (Eucosmetus),
Helonotocoris, 39 Helopeltis, 439 Hemidiptera, 191 Hemicocephalidæ, 193	illustris (Cavelerius), 24 imitator (Dindymus), 104 iminitis (Lygus), 456	insignis (Eumerus), 292 Insignis (Ninus), 19 insignis (Physorhynchus), 322
Henicocephalus, 193 henrici (Ischnobæna), 214	nnpexa (Epirodera), 247 nnpiger (Biasticus), 337	instabilis (Pirates), 298 intaminatus (Abdolo- minus), 91 intermedius (Ambly-
Henricohahma, 387 Henschiella, 193 heraldus (Oxycarenus),	impressicollis (Sphedano- lestes), 339 impudiciis (Oncocephn-	thyreus), 148 intonsus (Diognetus),
44 Herdomaria, 414	lus), 229 mæqualis (Lygæus), 8	432 intrums (Isometopus),
Hermotinus, 462	Inara, 273	484
heros (Isyndus), 376 Heterogastrinæ, 35	incerta (Sastrapada), 224	invisiblis (Emesa), 216 Iphicrates, 27
Heterotomaria, 473	meisuratus (Argenis),	Iphita, 96
heydeni (Tapenius), 281 hirtulus (Blissus), 28	435 meisus (Eucosmetus),	iracundus (Harpactor), 332
Holoptilma, 198	56	Irantha, 385
Holoptiline, 198	meomptus (Lygnus) 8	Isabel, 415
Holoptilus, 198, 199	inconspicuus (Nysius), 18	Icabellina, 415 Ischnobæna, 213
holosericeus (Tropiste- thus), 70	indagator (Sycanus),	Tschnodemus, 27
Holotrichius, 250	355	Ischnonyctes, 216
Homalosphodrus, 348	indecorus (Euscopus),	Ischnotarsus, 82
Hophstocelis, 300	106	Isometoparia, 483
hoplites (Sinea), 385 horrenda (Ectrichodia),	ındıca (Tribelocephala), 220	Isometopidæ, 483 Isometopinæ, 483
320	indicus (Aneurus), 166	Isometopus, 484
horrida (Scipinia), 384	indicus (Lethreus) 88	Isyndus, 376
horridus (Ectomocoris), 292	indicus (Nabis), 402 indicus (Petalochirus),	jayana (Lisarda), 240
hospes (Lygous), 6	242	jucundus (Geocoms), 31.
humeralis (Disphinctus),	indicus (Primierus), 61 indicus (Sphedanolestes),	jurgiosus (Paracalocoris), 449
humeralis (Dodonæus), 399 humeralis (Mastaco-	340 indicus (Tropistethus),	kalidasa (Eotrechus),
cerus), 255	71 indigna (Ectatops), 103	182 Kangra, 427
Hyalopeplus, 447	ındra (Physopelia), 98	larenta (Mytophanes),
hybridus (Pirates), 297. Hydrobates, 184	ineptus (Agriolesies), 358	205 Lunharm (Westing) 38
Hydroëssa, 174	mermis (Heni icohahnia),	kinbergi (Hyginus), 38 Klinophilos, 410
Hydrometra, 170, 176	389	Llugi (Oneccephalus),
Hydrometridæ, 168	mermis (Sycanus), 356	230
Hydrometrinæ, 170 Hyginus, 38	mfuscatus (Cantacader), 124	Inyvetti (Reduvius), 251
Hygrotrechus, 176 Hymenocoris, 193	mfusum (Megacœlum), 427	kœnigu (Cimex), 118 kœningii (Astenius),
Hymenodectes, 193 Hypertolmus, 332	nnetata (Pygolampis), 224	118
hypogastricus (Dysder-	mornatus (Endochus),	Labidocorie, 313
ous), III. bystricellus (Ayrerus), 141	369 inscripta (Acanthaspis), 271	Laboparia, 479 Lacknophorus, 68
hystrix (Brassivola),	inscriptus (Pirates), 295	laciniata (Phatnoma), 126
374	insignis (Critobulus), 77	lacustris (Gerris), 176

lætus (Oxycarenus), 43 lævigatus (Miris), 423 l'evis (Aneurus), 166 lagennier (Lygæus), 6 Lamphrius, 332 Lamprodema, 71 Lampronotus, 92 Lamproplax, 93 Lamprotrechus, 176 lanarius (Paracalocoris), 450 laniger (Reduvius), 249 lanio (Lygneus), 6 lanus (Dindymus), 110 lanius (Scadra), 308 lankana (Berta), 481 Largine, 94 largoides 103 (Ectatops), Larymna, 314. Lasiocera, 199 Lasiomerus, 399 lateralis (Brachyrhyn-chus), 161 lateralis (Ectatops), 105 lateralis (Melamphaus), 103 laticauda (Ptilomera), 185 laticandata (Ptilomera), 185 latifer (Pirates), 298 latus (Aphanus), 81 latus (Bosbequius), 65 lavateræ (Oxycarenus), 43 lectularia (Acanthia), 410 lectularius (Cimer), 410 lectularius (Klinophilos), 410 Leistarcharia, 207 Lemnius, 66 Lenmaria, 275 Lonæus, 278 lenzu (Chilocrates), 466 Leotichius, 400 Leptomera, 217 Leptopine, 406 leptopoides (Paromius), 50 lepturoides (Pirates), 301 Lestomerus, 297 Lethwaria, 78 Lethaus, 87 leucoceras (Dieuches), leucomesus (Sycanus), 352.

leucospilus (Lachnophorus), 70 leucurus (Pyrrhobaphus), lewisi (Mevius), 453 lewisi (Mizaldus), 68 lowisi (Pachygrontha), 40 lewisi (Paracopium), 128 Libavius, 313 limbata (Ectatops), 104 limbata (Iphita), 96 limbifer (Dormatinus), 115 limbifera (Ectrichodia), 325 Lamnobates, 170. Lunnogonus, 176 Lamnometra, 176. Limnoporus, 176 Lamnotrechus, 176 linearis (Cylindroste-thus), 184. lineata (Pachygrontha), lineatipes (Acanthaspis), 268 lineatipes (Antilochus), 102 lmeifer (Capsus), 447 lineifer (Hyalopeplus), 447 lineolatus (Calocoris), 451. lineosus (Aphanus), 80 lineosus (Oncocephalus), 230. linnæi (Physorhyuchus), 319 Lanslicosteus, 287 Liocoris, 438, 463 Liolobus, 79. Liops, 482 Luarda, 237 Lissonyctus, 339. littoralis (Salda), 405 lituratus (Geocoris), 30 lıvıda (Campylonına), 483 lividipennis (Cytorrhinus), 476 lobatus (Velinus), 346 loczyi (Coranus), 381 Louita, 94. longicollis (Reduvius), **J**52 longicornia (Macrocerœa), 95 longicornis (Pachy grontha), 42

longicornis (Pœciloscytus), 458 longifrons (Harpactor), 337 longimanus (Ectifioderus), 326 longinus (Narsetes), 350 longipennis (Nabis). **40**0 longispina (Lisarda), $2\overline{39}$ longusuma (Lohita), 95 Lopbocephala, 331 Lopomorphus, 423 Loricerus, 314, 318 Lorichius, 402 Lucitanus, 465 luctuosus (Rihirbus), 378 lugubris (Aradus), 160 lugubris (Dermatinus), lugubris (Oxycarenus), Luridus (Diplonotus), 54. luterpes (Acanthaspis), 260 Luteva, 208 lutulentus (Camptobrochis), 461. Lygearia, 2 Lygæidæ, I Lygwine, 2 Lygæodon, 5 Lygæosoma, 5, 13 Lygeus, 5 Lygocoris, 454 Lygus, 454

macerrima (Ischnobæna), 213 Macracanthopsis, 362 Macrocapsus, 465 Macrocephalus, 146 macrocophalus (Cimex), Macrocerœa, 94 Macroparius, 17 Macropes, 24 Macrosandalus, 291 maculata (Pasiropsis), 256maculata (Velitra), 277 maculatus (Graptostethus), 11 maculatus (Polytoxus), maculatus (Tyraquellus), magulicollis (Lygœus), 8

migratorius (Dysdercus), 120 ALPHADETICAL INDEX migratorius (Endochus), 368 Merodactylus, 146 Mecrocleptes, 249 megacephalus (Geocoris), 29. miles (Sycanus), 355 maguliventris (Scadra), militaris (Lygnens), 6 militaris (Sycanus), 332 maculosa (Alemena), 370 milthinus (Harpactor), Mogaccelum, 427 mæsarum (Disphinetus), Megaloceries, 424 mimica (Prostemmidea), megaspila (Acanthaspis), 265 Meganotus, 116 magnificus (Felisacus), (Rhaphidosoma), Melamphaus, 107. 63 Mimicus, 87 minuta (Gerris), 181 **4**39 minutus (Halticus), 480 Melandiscus, 79 majus majusculus (Gonatas), 90 Melanerythrus, 5 mirabilis (Aradus), 155 Ajusculus (Henico-cephalus), 194 ajusculus (Arocamelanocephalus Mirarin, 414, 422 majusculus tus), 15 Melanocoryphus, 5 Mirides, 414 (Opistho-Mirine, 414 majusculus Melanopleurus, 5 platys), 221 (Agrio-Miris, 423 melanopterus (Physo-Mizaldus, 63 modestus (Dienches), 83 malabaricus rhynchus), 321 lestes), 358 (Vilius), modestus (Oncocephalus), melanopterus Malalasta, 440 malayensis (Mertila), 325 Melanospilus, 5 melanospilus (Holophi-Monalomonaria, 433 malayus (Petalochirus), Monanthin, 135, 144 monoceros (Armachanus), lus), 199 malayus (Vehnus), 347 Malous, 32 Melanostethus, 5 Melanotelus, 12 meldolm (Tinrodes), 284 (Henrico-479 melinarthrum (Gardena), montana Mallocoris, 29 manillensis (Grapioste hahma), 388 (Brachyrhynmembranaceus (Brach) montanus morosus (Oncocephalus), thus), 8 rhynohus) 160, 161. Maotys, 198 Marbodus, 248. Mardania, 257 (Aspilocory mulsanti (Mesovelia), (Allocorhynmendicus phus), 12 (Sphedanomundulus (Pirates), 301 marginalis marginalis (Melamphamendicus lestes), 341 mutilloides (Pirates), Mendis, 312. marginata (Harpedona), Mertila, 472 merula (Endochus), 368 Myrophanes, 204 myitta (Liocoris), 464 merula (Lachnophorus), marginata (Pasiropsis), My odocharia, 47 mesiostigma (Dysderous), marginabus (Cænocoris), Myridina, 414 Myris, 423 (Valosbpo. marginatus (Harpactor), 332 mesopyrrhu (Apechtia), mystions (A drus), 359 marginatus (Matenesius), Mystilus, 420 Mesovelia, 168 281 Mesovelune, 168 murginatus (Physorhyn-Nabicula, 399 Metapteraria, 216 Metastemma, 392 Nabidinæ, 389 marginellus (Harpactor), Nabidinaria, 397 Metocus, 82 Nabina, 391 Nabia, 392, 399 Metrocoris, 188 marginellus (Smintho-Movius, 453 Mezira, 159, 164. naboides (Oncocephalus), micans (Halobates), 187 marginicollis (Geocoris), micrographa (Accinthas-pis), 269 Nuogeus, 167. 228marmoratus (Bothrio-Naphius, 79 Narsetes, 349 micropterus (Oncocepha-Micropellus, 5 (Brachyrhynmarshalli (Dinomachus), nasutus (Br. chus), 160 lus), 232 Mastacocerus, 255 Naudarensia, Micropus, 27 Microsandalus, 297 Neceretus, 100 Matenesius 425 maura (Iamprodema),71 Microtomideus, 79 maurus (Angermaus), Microvelia, 174 Medistoscelis, 421

Neovelia, 171 nern (Cænocoris), 16 Neuroctenus, 164 nexa (Cysteochila), 139 nexus (Polycrates), 64 nicobarensis (Cænocoris), 17, Nicostratus, 475 metneri(Allconhynchus), nietnori (Pamera), 53 niger (Rihirbus), 378 nigerrima (Pasiropsis), 257 nigra (Crimia), 160 nigrescens (Nabis), 401 nigricans (Rhagovelia), 171 nigriceps(Graptostethus), nigriceps (Oncopeltus),4 nigricollis (Harpactor), nigricollis (Tetroxin). 266 nigricornis (Endochus), 3(55) nigricornis (Odontopiis), 109 nigripennis (Mendis), **3**12 nigripes (Antilochus), 102 nigripes (Ectrychotes), 318 nigriventris (Vilius), 325 mgrolineatus(Darbanus), 363 nigronasuta (Campylomma), 483 nigropictus (Pœantius), 85 nigro-ruber (Spliedanolestes), 343 nigroviolaceus (Physorhynchus), 320 (Pachynigrovittata gronthu), 41 nilgiriensis (Harpactor), 336 nilgiriensis (Monanthia), 144 Ninus, 19 Nitheeus, 17 nitida (Geiris), 178 nitidulus (Neuroctenus) 165 noctis (Lachnophorus), noctulus (Ischnodemus), 27

nodipes (Macracanthopsis), 362 notata (Epirodera), 247 notata (Pastropsis), 256 notatus (Oncocephalus), 227.Notostira, 424 novitius (Combalus), 431 Nymus, 17 obscurn (Eumenotes). 155 obscurus (Coranus), 381 obscurus (Isyndus), 377 obscurus (Scantius), 118 obtusus (Lygus), 458 occidentalis (Astacops), 4 Ochetopus, 222 Ochrimnus, 5 ochropterus (Ectomocoris), 294 ochropterus (Ophthalmicus), 29 Ochrostomus, 5 octomaculatus (Cimex), 293 oculata (Plotariola), 202 Odonia, 155 Odontopus, 108 Œnusa, 237 olivaceus (Deræocoris). 466 olivaccus (Dyndeicus), 119. Oncauchenius, 332 Oncocephalus, 227 Oncopeltus, 4 Oncylocotis, 193 Onomaus, 416 Onychotrechus, 182 ophirica (Ectrichodia), 317 ophurica (Scadra), 317 oplithalmica (Ectatops), 104 Ophthalmicus, 29 Opinus, 250, 279, 282 Opisthophitys, 221 Opistoplatys, 221 Oplistopus, 250 Opsicotus, 250 orientale (Lygneosoma), 13 orientalis (Aphanus), 81 orientalis (Brachyrhynchus), 160 or rentalis (Camptobiochis), 460 orientalis (Chumarrho metra), 190 oriontalia (Hebrus), 167

orientalis (Mesovelia), 169 ornundus (Deræocoris), 467 ornandus (Scolopostethus), 93 ornata (Edulica), 46 ornatus (Geocoris), 31 ornatus (Gerbelius), 254, ornatus (Lygæus), 8 Orsilberia, 17 Orthea, 51 Ortholomus, 17 Orthops, 454 oryz (Helopeltis), 441 ustentua (Henic scephalus), 195 ovalis (Dindymus), 112 ovatus (Lemnius), 67. Oxycureninæ, 42 Oxycarenus, 43 pabulmus (Lygus), 454 Pachygroncha, 40 Pachy grontha, 40 Pachy gronthine, 39 Pachymerus, 79 Pachynomaria, 390 Pachynomina, 390 Pachynomus, 390 pallens (Rhyparachromus), 79 prilens (Stantius), 117 pallescens (Polytoxus), 218 pallicornis (Painera), 52 pallidulus (Dienches), 85 pallidus (Elasmognathus), 142 pallipennis (Nysius), 19 pallipes (Lygæus), 19 pallipes (Reduvius), 250 palpator (Systellonotus), patudum (Gerris), 180 Pamera, 51 Panthous, 379 Panthousaria, 379 Pantiliodes, 427 par (Neuroctenus), 164 Paraculocous, 449 Paracomum, 128 Paralencus, 279 Paromus, 50 Pareialus, 348 partitus (Liocoris), 464 parvula (Ploeiomera), 52 partulus (Rhyparachro ınus), 52

parvus (Epidaus), 972 Pasatus, 75

•
ALPHABETICAL INDEX. politus (Thebrius), 67
ALPHABETICAL INDEX. politus (Thebruus), 67 politus (Thebruus), 67
AIPHABLE politis (4. Polycrates, 64. Polycrates, 217.
Megneti Polycitatils 217.
pictural 430 Polyton (Onoman)
and (UIB) has best series
Pashur interest pict oos oon Poct
Pasiropsus, (Oligenes), 12. patricus (Oligenes), 12. patricus (Oligenes), 12. patricus (Oligenes), 12. patricus (Androclus), 290 pretus (Andr
District 401 Pr. District Applies (Action 1)
patrills 466 pectoralis (Gerris), 181 pectoralis (Acanthaspis), pedata (Naudarensia), 86 pedata (Acanthaspis), pedata (Acanthaspis), pedata (Pyrrhopeplus), pracerptus (Macropes), pracerptus (Macropes), pracerptus (Acanthaspis), pracerptus (Acanthaspis),
performing (Cosmolestes); (Micro)
Dergon (Acousting)
Pedestris (Aphanus), 79 Pedestria (Aphanus), 79 Pedest
212 (Inhalian) (Completed
prodestris (Physoria) plento prodestris (Arlemidorns),
Determ (201) And Landmill 10
(Cansus),
pegasus (Capstage (Capstage (Plateria), 31) Peirrites, 291, 207 Pelin (Edocla), 273 Pelin (Edocla), 273 Pelin (Edocla), 273 Pelin (Edrychotes), 273 Primerus, 40
Primerus, (Crescentius)
pening and photo 92 annapatur
Pelrosoma, 40 Pelrosoma, (Guisardus), pilipa (Drymus), 377 Pelrosoma, (Guisardus), pilipa (Drymus), 377 Pristhesancus, 383
Peliosoma, 40 Peliosoma, (Guisardus), Peliucidus (Guisardus), Peliucidus (Guisardus), Peliophoraria, 414 Pilophoraria, 414 Pilophoraria, 415 Pristhesancus, 383
pellucitus Phopus (Isyndus), 15 436 peltastes (Sinea), 384 phosipes (Isyndus), 15 peltastes (Sinea), 476 phosipes (Oncocephalus), 15 peltastes (Sinea), 384 phosipes (Isyndus), 15 peltastes (Sinea), 384 phosipes (Isyndus), 15 pertastes oncus 320 Pristhes oncus
Periseopus, 476 Periseopus, 75 Periseopus, 320 Pristlessina, 320 P
Periscopus, 75 pilosus Productus (Crimina Productus Productus) 184 Peritropus, 175 Procorus, 20 setchus), 392 Procorus, 201, 207.
Peritophis (Acantinaspart Protest, 201, 201, 201, 201, 201, 201, 201, 201
pernounts Pernounts Reducins, 225 Piratina, 228 Piratina, 228 Piratina, 228 Piratina, 228 Piratina, 228 Piratina, 238 Prostemmaria, 63 Prostemmari
200 msram
Petalochrus, 240 Petalo
phedria (Eurgoras), Psophas, Att,
The state of the s
Thursday 194 1911 South (Geometric State of
Pan / (chianella) Dis etharm, 100 1 mora les
ph sound, 120 Phisopetano mbens (1) s Cahedano
Ethan 50 Dans 250 La soul of
Phiesian to Chief in 136 phiesian 339 main.
Photom 205 Phillips 240 And Silver
Phorticus, 335 Platychira, 257 pulchell ¹ Phyllontochila, 135 Platymens, 257 pulchell ¹ Platymens, 110 Platymens, 110 Platymens, 247. Platymens, 255 pulchell ¹ Platymens, 257 pulchell ¹ Platymens, 257 pulchell ¹ Phorticus, 333 (Subeda-
Phyllontocum, 146 Platymerts, 110 Plymatide, 247. Platymerts, 110 Platymerts,
Dividual was allowed to the control of the control
Physopelta, 17 plebeja (Ottors, 11 chins), Spinetal Physical
Physic 446 Phone 101 205
Plysorityned 448 Plearin, 201 209 notes culatus (Geocott Plystocornes, 448 Ploneria, 201 209 pulvisculatus (Geocott Plystocornes, 448 pulpisculatus (Geocott Ply
Phytocolar Tostomeray Ploiting of Antiophian
Phytocoris, Lestomerus), Plournaris, 202 ptenpennis (Lestomerus), Plournaris, 202 Plournaris, 201 Plournaris, 202 Plournaris,
Piceoperint (Derecoris), Plouriol 201 punctatus (Lincoln 1901) Piceopering (Derecoris), Plouriol 201 punctatus (Lincoln 1901) Piceoperint (Derecoris), Plouriol 201 punctatus (Derecoris), P
piceome 200 pirmus 205
piceoniged (Acuthospis), 250 picina (Acuthospis), 910 picina (Acuthospis), 910 Picson 365 Picson 365 Picson 365 Picson 365 Picson 365 Picson 455 Picson 4
picina di Adominas Positiva de Bochi de la Companya (Digitale de Companya de C
picinal Pachyloman poetror
Cospication Production
pictics. Pacity, 336 paners, 460 ogs
Pointesin Pointesin Pointesin 354 Pointesin 354 Pointesin Pointesin Disphinetus), punctum Pierresin 2 L
Pointesin Pointesin Pointesin 354 Pointesin 354 Pointesin Pointesin Disphinetus), punctum Pierresin 2 L
Pointesin Pointesin Pointesin 354 Pointesin 354 Pointesin Pointesin Disphinetus), punctum Pierresin 2 L
preticellis (Canthesin Pointdustria 354 punctum Printes), Pointdustria 354 punctum Printes, Pointdus (Disphinelus), pointus (Disphinelus)
Pointesin Pointesin Pointesin 354 Pointesin 354 Pointesin Pointesin Disphinetus), punctum Pierresin 2 L

rama (Acanthaspis), 268

rama

417

(Callicratides),

purpureus (Vesbius), 344 pusilla (Sthenaridea), 475 pusillum (Lygnosoma), pusillus (Hebrus), 167 pustulata (Acanthaspis), 270pygmæus (Antilochus), 102pygmæus (Harpactor), 336 pygmæus (Pœciloscytus). $\bar{4}59$ Pygolampis, 222 Pyllontocheda, 135. Pyrrhobaphus, 14 Pyrrhocoridæ, 94 Pyrrhocorine, 99. Pyrrhocoris, 116 pyrrhocoroides Æschmes), 106 pyrrhomelas (Paralenœus), 279 pyrrhomelas (Sycanus), 355 Pyrrhopeplus, 115 pyrrhus (Lenœus), 278 quadratomeculatus (Graptostethus), 9 quadratus (Amblythyreus), 148. quadricornis (Cantacader), 123. quadriguttata (Physopelta), 98 quadriguttatus (Ectomocoris), 293 quadrinofata (Acanthaspts), 259 quadrinotatus (Pirates), 300 quadripunctatus (Amulius), 327 quadrisignatum (Allæocranium), 250 quadrisignatus (Graptostethus), 10 quadristillatus (Acanthaspis), 259 Quercetanus, 310. Qurinus, 153 quinquecostatus (Cantacader), 123 quinquespinosa (Acanthuspis), 257, 262 Raglioides, 79

Raghus, 79

Rasahus, 291, 303. ravana (Isabellina), 415 ravana (Phyllontochila), 136 (Rhagovelia), ravana 172 ravana (Shana), 466 reclinatus (Sycanus), 352 recticornis (Megaloceræa), 424 recurva (Lisarda), 238 Reduviaria, 248 Reduvidæ, 196 Reduviina, 329 Reduviolus, 399 Reduvius, 250, 332 relata (Scadra), 309 relatum (Megacœlum), 428 relatus (Quercetanus), 311 remus (Capsus), 468 repentina (Microvelia), 174 reticulatum (Lygmosoma), 13 reticulatus (Isyndus), 376 reuteri (Eumerus), 292 reuteri (Harpactor), 335 Rhagovelia, 171 Rhaphidosoma, 330 Rhaphidosomaria, 329 rbexenor (Onychotrechus), 183. Rhinicoris, 332 Rhinomiris, 426 Rhodiginus, 62 rhombiventris (Amblythyreus), 149 Rhopalotomus, 468 Rhynocoris, 332 rhypara (Lisarda), 238 Rhyparochromana, 58 Rhyparochromus, 79 Rhypodes, 17 Ribirbus, 378 rivulosus (Reduvius), robustus (Henicocephalus), 195 roseus (Psallus), 482 rubiacea (Ectatops), 104 ubidus (Melamphaus), rubiginosus (Dindymus), 111

rubra (Durganda), 283 rubrescens (Orimin), 164, 165 rubricatum (Megacœlum), 429 rubricosus (Physopelta), 102 rubrifemur (Amidus), 328rubrocinctus (Melamphaus), 108 rubrofasciatus (Conorhinus), 286 rubromaculatus (Physorhy nchus), 322 rubropicta (Velitra), 276 rubrovariegata (Zanessa). rubrovulneratus (Dermocoris), 486 rufcscens (Ectrychotes), 315 ruficeps (Ribirbus), 378 rufidorsis (Rihirbus), 378 rufifemur (Ectomocoris), 292 rufipennıs (Rıhırbus), 378 rufipes (Euscopus), 106. rufus (Deræocoris), 467 rufus (Perittopus), 175 rufus (Tapeinus), 283 rugicollis (Opinus), 278 rugulosa (Acanthaspus), 264Rulandus, 396 (Antilochus), russus 101 rutilus (Geocoris), 31 sabuleti (Ischnodemus), 27 sacer (Cimex), 298 Sadoletus, 37. sahlbergi (Gerris), 179 Saicina, 217 Saicine, 217 Sakuntala, 135 sakuntala (Onychotrechus), 183 Salacia, 72 Salda, 29, 404 Saldıdæ, 404 Saldınæ, 404 Salyavatına, 236 Salvavatinæ, 236 sanctus (Pirates), 298 sandaracatus (Tancredus), 430

00-
ALPHABETICAL INDEX. Stribenea, 303 Stribenea, 303 (Dindymus), 126 stribenea, 303 (Acanthaspis), 265 (Acanthaspis), 274
ALFHARETICAL INDEX. Surthenea, 303 Sirthenea, 303 Sirthenea
ALPHADE Sita (Diminispis)
DC' - IBJO ALGODIO RIBO ALGODIO
sunguinalis (Thaumasto- sericans (Acanthaspis), serica
sericata (Addisorderius), Smuthus, Zionera), 50
sobring 450 (Mendis), 200 (Neuro Sobring 450 (Sohedano
312 Mind Minds
"" " " " " " " " " " " " " " " " " " "
sangunolentus sangunolentus rius), 333 rangunosus (Yesbius), sermaculatus (Pirales), sermaculatus (Odonto- Spilalonius, 2297. Spilalonius, 5 Spilalonius, 5 Spilalonius, 5 Spilalonius, 5 Spilalonius, 5 Spilalonius, 297. Spilalonius, 297. Spilalonius, 297.
conguinosus Bearing (Odoline Spinicaput (Ar
Scantius, 117 302 Scantius, (Oncocophar 158 Scalotrichia, (Oncocophar 240 (Alemens), 374 Septimber (Bartacus), 374 spinifex (Bartacus), 374 spinifex (Bartacus), 374 spinifex (Bartacus), 374
Scantills, 332 Scalotriphia, Quecophar 158 Scalotriphia, Quecophar 158 Scalotriphia, Quecophar 158 Septimics (Particus), spinifex (Bartacus), spinifex (Bart
schlanus), 93 polta), 93 polta), 94 mus), 84 mus), 84 mus), 84 mus), 94 mus), 95 mus
achine 193
Scrodopter 384 Scipina, 364 Sci
scrietoide 421 signatus 341 spinois (Henricobanus) 441 signatus 341 spinois (Henricobanus) 54 spinois (Henricobanus) 55 sp
Scipina, 92 signatus (Bohedano mus), 64 signatus (Bohedano mus), 64 signatus (Bohedano mus), 64 signatus (Bohedano mus), 64 signatus (Bocharis), 64 signatus (Bocharis), 64 signatus (Bocharis), 65 si
anoth (Califford and Califfor
scrutator 184 Jacqua), Big (Dinomic spins)
"
(Terror choice) silling agercush splends
soutellars (Ectricines) amples squaldus (Lygrous), 6 and 121. (Legtomero squaldus (Harpactor), 121.
source (Maryan 13) contonero squalus (Haryan
scutellaris (Rihirbus), simplex 488 (Bothriomris), squares (Hydrome-simplex 469 (Cyrates), 301 stagnorum (Hydrome-stagnorum), 378 (Scadru), 309 simplex 469 (Cyrates), 301 tra), 170 tra),
ecutellaris (Annual Coris) (Bothriol Staces, III (II) are summinus (Bothriol Staces, III (II) are summinus (II) are summ
scutchars (Scadni), 301 soutchars (Malcus), 33 success (Vehirs), 377 success (Vehir
scutellaris (Scalins), 33 scutellaris (Malcus), 33 scutellaris (Malcus), 33 scutellaris (Malcus), 33 sincursis (Veltra), 377 sincursis (Veltr
sincellatus sincellatus (Lacina stalli
ACCOUNTS SIDE OF THE PARTY OF T
selma (Garris), (Capsus), rus), rus), or rus), or rus), semiclusus singulensis (Microtot Stalia, 3119), reus), semiclusus semiclusus, rus), rus), rus), or rus), semiclusus singulensis (Microtot Stalia, 3119), reus), semiclusus, rus),
488 (Diagram) and lensis state
comicolos and ogo (Pantido) (Cinzo
(Kluste confidence con
somidavis (Rinking Special Spe
chromanius (Sycumorus)
enmonginatus semmonginatus semmonginatus semmonginatus singularis singularis singularis res) self
nus), 353 16 ris), 281 nuslus (Lygenus) 312 Sinterus, 65
nus); 300 (Lygecus) 312 Sinterus, 65 semirulus (Mondus), 312 Sinterus, 65 secontine, 127.
Serun-

Stenolæmaria, 201 Stenolæmus, 203 Stenolemus, 203 Stenonabis, 399 Stenopirates, 193 Stenopoda, 222 Stenopodina, 222 Stenopodinæ, 222. Sthenaridea, 474 stigmatellus (Sphedanolestes), 341 stigmatica (Velitra), 276 stigmativentris (Pirates), stoliczkanus (Calocoris), 452 stoliczkanus (Phytocoris), stolln (Eungoras), 363 strumineum (Megacœlunı), 428 strammipes (Alemena), 370 strigifer (Pirates), 363 subapterus (Coranus), 380 subauratus (Iphicrates), 28 subauratus (Macropes), 26 subcinctus (Nysius), 19 subflavus (Prodromus), 437 subirroratus (Capsus), 488. enbniger (Endochus), **368** subovata. (Monanthia), 123 subrufa (Acanthaspis), 239 subviridis (Prodromus), 437 succinea (Acanthaspis), 266 Suffenus, 75 sufflatus (Yolmus), 357 suffusus (Cadamustus), 133 sumatrana (Lohita), 95 superba (Malalasta), 446 superstituosus (Cimex), surmamensis (Lygaus), Sycanaria, 348. Sycanus, 351 syriacus (Dieuches), 82 Systelloderce, 193.

Systratiotus, 458

tabidus (Cymus), 21 tagalicus (Brachyrhynchus), 162 tagalicus (Cyanocoris), 361 talpus (Physorhynchus), 321 Tancredus, 430 Tapeinus, 279, 282 Taphrostethus, 123 Tapınus, 279 tavoyana (Acanthaspis), 261 Telem, 125 Teleonemia, 142 telescopicus (Henicocephalus), 194 Tenagogonus, 176 tenebrarius (Opisthoplatys), 221. tenericornia (Brachyrhynchus), 162 Teratodelların, 470 tergemina (Acunthaspis), 269 terminalis (Gastrodes), 45 testacerpes (Rhyparochromus), 84 testaceus (Bothriomiris), 470 (Reduvius), testaceus 250. testaccus (Rihirbus), 378 Tetralaccus, 15 Tetroxia, 257 Thaumastomiraria, 472 Thaumastomiris, 473 Thebanus, 67 therrora (Helopeltis), 440 Thodelmus, 235 Tholdelmus, 235 thoracicus (Dysdercus), 113 thoracicus (Reduvius), 250(Dindymus), thuobergi 113thyoneus (Dindymus), 110 Tiarodes, 281 tibialis (Ectomocoris), 293 tibialis (Nabis), 400 tibialis (Rihirbus), 378 tibialis (Scadra), 309 tigrina (Ptilomera), 185 tinctus (Macropes), 26 tineoidus (Lumprodema), 71.

Tingidaria, 130. Tingididie, 122 Tingis, 131, 135. Tingitaria, 130 tingoides (Oysteochila), tipulina (Myiophanes), 204 trabcata (Diniella), 74 transnominalis (Reduvius), 251 Transvaalia, 4 transversus (Epidaus), 371 triangulus (Brachyrhynchus), 161 Tribelocephala, 220 Tribelocephalina, 219 Trabelocephalma, 219 trichrous -(Sphedanolestes), 343 tricolor (Geocoris), 29. Trigonotylus, 424 tramaculata (Acanthaspis), 268 trimaculatus (Canthesancus), 234 tripustulatus (Liocoris), 463 trisignatus (Graptostethus), 10 tristan (Gerris), 179 tristicolor (Harpactor), 335 tristriatus (Lygeus), 19 Tritomacera, 92 trochanterious (Rihirbus), 378 Tropidothorax, 5 Tropistethus, 70 truncata (Glossopelta), 150 truncatus (Aradus), 155 tuberculatum (Rhaphidosoma), 330 tuberculatus (Physorhynchus), 320 turgidus (Clapmarius), 420 Turnebus, 485 typica (Henricohahnia), 387 typicus (Cadainustus), 132 typicus (Gerbelius), 253 typicus (Gonatas), 89 typus (Gonsalvus), 93 tyrunnus (Pyrrhobaphus), 14 Tyraquellus, 47 I Tytthus, 476

ALPHABETICAL INDEX. (Ectomocoris), angpun vitripennis (Hyaloperariabilis (Sphedano-lestes), 342 vittata (Hidrometra), varicornis (Odontopus), Udalrıcus, 49 ulysses (Isyndus), 377 vittiventris (Pyrrhocovariegatus (Petalochirus), umbonatus (Lorichius). Tiverra (Holoptilus), 200 umbrinus (Endochus). 240 volucris (Scentius), 117. Varus, 250 Velia, 172 Umslopogas, 427 Volumes, 171 undulata (Pamera), 53 wahnschaffer (Henrico-Velmaria, 345 undulatus (Brachyrhyn-Velinis, 346 Velitra, 275 habnia), 387 walkeri (Pirates), 209 walkeri (Pirates), 209 (Pictinus). chus), 162 (Pygolampis), vorrucicollis wasmanni (Fontejanus), unicolor versicolor (Aradus), 154 unifasciate (Acanthaspie), wolffi (Coranus), 382. versicolor - unifacciatus (Poculoscy versicolor (Tisrodes), uniformis (Camptobro-Xanthochilus, 79 xerampilina (Acanthus-Vertomannus, 47. uniformia (Oantacader), Vesbistis, 344. pis), 258. Vesbius, 344 (Rhinomiris), (Dienches), 124 VICATIUS uniformis ricinus (Harpactor), 331 yeh (Dieuches), 82 Yolinaria, 357 uniformis (Lisarda), 238 (Petalochirus), uniguitatus (Dieuches), Vicinus Yolinus, 357 ypsilon (Pirates), 296 viduus (Phorticus), 395 Urentius, 134 ursus (Holoptilus), 199 Vilus, 324. ustulatus (Phytocoris), Villanovanus, 364 villious (Sycanus), 354. Zanchius, 477 (Acanthaspus), Zanessa, 432 zealandicus (N. sius), 17 448. zebraica (Acanthaspis), vincts. ragabunda (Plotariola), 202 vincta (Pamera), 52 vinulus (Allœorhynchus), zetterstedt: (Pristhesanvagans (Celantie), 137 vinulus (Rhyparochromus), 52 cus), 383 Valdasarın, 433 Zostus, 332 viridanus (Lygus) 456 Valentia, 239 validus (Sadoletus), 37. viridulus (Nabis), 402 Valleriola, 405 Valleriola, (Dergocoris), variabilis (Dergocoris),

467